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REPORT OF THE

COMMISSIONER OF EDUCATION

OF PORTO RICO

1921

From Report of the Governor of Porto Rico, 1921, pages 370 to 410, inclusive

BUREAU OF INSULAR AFFAIRS
WAR DEPARTMENT



WASHINGTON
GOVERNMENT PRINTING OFFICE
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APPENDIX VII.

REPORT OF THE COMMISSIONER OF EDUCATION.

OFFICE OF THE COMMISSIONER,
San Juan, P. R., August 18, 1921.

SIR: In compliance with the provisions of law, I have the honor to submit herewith the twenty-first annual report of the department of education, followed by supplementary reports made by the commissioner of education in his capacity as president of the board of trustees and chancellor of the university and as president of the two boards of trustees of teachers' pension funds.

Very respectfully and very truly yours,

PAUL G. MILLER,
Commissioner of Education.

The GOVERNOR OF PORTO RICO,
San Juan, P. R.

INTRODUCTORY SURVEY, 1920-21.

School population.—According to the census of 1920 Porto Rico has a population of 1,299,809. The number of children of legal school age—i. e., between 5 and 18 years—is 438,743, and the number of children of compulsory school age—i. e., between 8 and 14 years—is 209,220.

The school year.—The legal school year consisted of 10 school months of 20 days each, leaving 193 school days after discounting legal holidays. In computing the average number of days schools were actually in operation all schools open at any time during the year, no matter how brief the time, have been taken into consideration, so that the closing of schools for any reason whatever reduced the averages as follows: Secondary, 190; elementary urban, 182.5; rural, 182.4; general average, 182.5. Night schools were maintained for 16 school weeks and the university for 36. The average number of pupils belonging and the average attendance are based on the number of days schools were actually in session.

Enrollment and attendance.—The total enrollment in all schools supported by public funds, excluding duplicates, was 193,269. Of this number 119,947 were enrolled in rural schools, 62,126 in elementary graded schools, 4,364 in secondary schools, 565 in collegiate departments of the University of Porto Rico, 1,040 in the summer session of the university, 2,987 in elementary night schools, 158 in night classes for technical instruction, 2,018 in special needlework and embroidery classes, 39 in rehabilitation service, and 25 in the school for the blind (Tables III, IV, and V). In addition to the persons enrolled in publicly supported institutions, 6,818 pupils attended private schools. (Table VI.) The total number of different persons who attended either public or private schools at any time during the year is 200,087.

The total enrollment in public schools was 43.1 per cent of the total population of school age and 90.3 per cent of the population of compulsory school age; but of the 209,787 children of compulsory school age only 138,983, or 66.2 per cent, were enrolled. (Tables III and V.)

The average number belonging in all schools, excepting certain special classes and the university, was as follows: Secondary, 3,846; elementary graded, 55,395; rural, 106,455; night schools, 2,398; total, 168,117. (Table III.)

The average attendance was as follows: Secondary, 3,605; elementary graded, 53,276; rural, 98,648; night schools, 2,000; total, 157,551. (Table III.)

Of all persons enrolled, 62.06 per cent were found in rural schools, 32.14 per cent in elementary graded schools, 2.2 per cent in secondary schools, 0.3 per cent in collegiate departments of the university, 1.6 per cent in elementary and technical evening schools, and 1.7 per cent in certain special classes.

Promotion and diplomas.—Of the 182,073 regular elementary day school pupils enrolled, 118,635, or 65.2 per cent, were promoted to the next higher grade, as against 64.4 per cent the preceding year. Using the average number belonging as a basis

for calculating promotion, 73,346, or 68.9 per cent, of the rural and 45,289, or 81.7 per cent, of the elementary graded pupils were promoted, as against 67 per cent and 82.6 per cent the previous year. On this basis the percentage for both elementary graded and rural pupils combined is 73.3. (Table III.)

Eighth-grade diplomas were granted to 2,485 pupils and 367 persons received high school diplomas.

Accredited private schools issued 17 high school and 212 eighth-grade diplomas.

Teachers.—There were employed in publicly supported schools of all grades 3,354 teachers, of whom 950 are men and 2,404 women; 2,636 are white and 718 colored. Of the teachers only 158 are from the United States, and 3,241 are Porto Ricans; but of the teachers employed by the department in elementary schools only 47, or 1.4 per cent of the total, are Americans from the States. Classified by position, the numbers are as follows: High schools, 116; continuation schools, 66; teachers of English, 88; special teachers of agriculture, 40; special teachers of music, drawing, physical training, and technical subjects, 15; teachers of needlework and embroidery, 32; teacher of blind pupils, 1; principals, 20; English graded, 1,189; rural, 1,702; university, 85; total, 3,354. (Table II.)

New teachers.—In addition to the special licenses granted to persons appointed directly by the commissioner of education, the department has issued licenses to new teachers as follows: English graded, based on normal diploma, 55; English graded, based on examination, 332; rural based on normal certificate, 120; rural, based on high-school diplomas, 42; rural, based on examination, 350; total, 899. Because of the shortage of teachers with legal qualifications willing to accept positions at salaries available, the department issued provisional nonrenewable licenses as follows: English, 3; English graded, 13; total, 16.

School buildings.—The schools of Porto Rico were conducted in 1,911 different school buildings, representing 3,166 different classrooms. Of these buildings 596 are public property and 1,315 are rented; 380 are situated in urban centers and 1,531 in rural barrios. (Table VII.) As to their character, school buildings vary from the straw-covered shack in remote rural districts to thoroughly modern concrete structures in towns and cities.

New sites and new buildings.—During the past year 11 new sites for school buildings have been acquired, 3 in urban centers and 8 in rural barrios. There were acquired during the year 9 graded school buildings, or additions thereto, with a total of 26 classrooms, and in rural barrios 10 school buildings and additions with 12 classrooms; 5 buildings with 53 rooms were begun and are in the course of construction, including high schools in San Juan and Guayama.

Agricultural and educational propaganda.—Agriculture was taught in 1,715 different schoolrooms, and 39,672 home gardens were cultivated through the efforts of the schools; 50 school exhibits were held. There were also in existence 1,429 parent associations, which held 3,946 public meetings. Teachers made 106,009 visits to parents' homes, and there were 2,123 rural conferences held.

Junior Red Cross.—The total number of members enrolled under the chapter school committee of the Porto Rico Chapter of the Junior Red Cross for the year 1920-21 was 134,670. The total receipts for the year were \$41,158.44, and the total expenditures \$22,024.79, leaving a balance on hand of \$155 in securities and \$19,345.31 in cash.

Fiscal aspects.—The total assessed valuation of property in Porto Rico on December 31, 1920, was \$286,415,516, or \$220.30 per capita of population. The expenditures for educational purposes were as follows: By the department of education, \$2,929,944.14; by the board of trustees of the University of Porto Rico, \$246,751.53, including \$48,847.21 from the Morrill-Nelson fund, contributed by the Federal Government, and interest thereon. In addition to the foregoing amounts the municipalities disbursed \$906,689.18 from municipal school funds, thus making the total outlay for educational purposes from all sources \$4,083,384.85. (Tables II, VIII, IX, X, XI, XII.)

Salaries of teaching and supervisory staff.—The sum of \$2,704,150.64, or 92 per cent of the total amount spent by the department from insular funds for elementary and secondary education, were paid out for this purpose as follows:

District supervisors.....	\$66,528.52
Principals.....	41,172.76
Teachers of English and English graded.....	1,133,509.80
Rural teachers.....	1,175,240.28
Special teachers of agriculture.....	44,551.00
Special teachers of drawing, music, etc.....	26,730.00
Continuation teachers.....	55,668.00
Pensions.....	26,806.19
High schools.....	129,617.34
Night schools.....	4,326.75
Total.....	2,704,150.64

The average monthly salary per teacher employed by the department was as follows: Elementary, \$76.84; high school, \$133.62; night schools, \$14.62. No distinction is made between salaries paid men and women teachers.

Per capita expenditures.—In computing per capita expenditures only those pupils in schools financially supported by the department were taken into consideration.

The total per capita expenditure by the department per pupil enrolled is \$14.91, per average belonging \$16.24, and per average attendance \$17.91.

The total per capita expenditure by the department and by the municipalities combined is \$19.30 per pupil enrolled, \$21.69 per average number belonging, and \$23.26 per average in attendance.

For elementary education the per capita expenditure from insular and municipal funds, based on the total number of pupils enrolled, \$19.50, per average number belonging \$21.79, per average attendance \$23.15.

The per capita cost of high-school education per pupil enrolled is \$50.55, per average number belonging \$50.60, and per average in attendance \$54.23.

The per capita expenditure from all sources per child of school age is \$8.35, per child of compulsory school age \$17.51, and per inhabitant \$2.82.

Textbooks and supplies.—The total amount spent for textbooks and school supplies by the department is \$124,785.52 or 66 cents per pupil enrolled, and 74 cents per average number belonging, but for textbooks alone the per capita expense was only 36 cents per pupil enrolled and 41 cents per average number belonging. (Table IX.)

Value of school property.—The net valuation of all publicly owned school property is as follows: Sites and buildings, \$2,912,771.63; equipment (furniture, apparatus, libraries, etc.) \$1,221,149.35; textbooks, \$439,528.10, cost when new; total, \$4,573,795.08.

During the past fiscal year 68,519 pieces of mail, or an average of 219 per day, were received and dispatched by the central office; 63,090 were letters and 5,459 packages.

RURAL EDUCATION.

During the past six years the department has given special attention to the improvement and development of rural education. The importance of an elementary education for the masses of the people has long been recognized as a prime need. In Porto Rico the vast majority of the people live in the rural barrios. The rural home, as a rule, is isolated and the peasantry enjoy few comforts of life. Since a majority of the parents are illiterate, it has been difficult to bring the home and the school into close relation. Nevertheless, with persistent effort great good has been accomplished.

A total of 1,702 rural schools were in operation, with a total enrollment of 119,947. This enrollment represents an increase of 4,870 over the previous year, with practically the same number of schools in session. Fully 90 per cent of the rural schools were on double enrollment—that is, one group of pupils attended the morning session and another similar group in the afternoon. Even with this double enrollment plan there are many thousands of children of school age for whom no educational facilities are available. The task of the rural teacher may well be realized when it is known that on the basis of total enrollment there were 70 pupils per teacher.

There has also been an increase in the average number belonging and the average attendance; the former was 106,455 and the latter 98,648. In addition to the children included in the figures quoted many others who live in semiurban districts attended school in town. Well-to-do people who live in the country usually send their children, especially after they have finished the rural course of study, to graded schools in urban centers.

Out of the total number of children enrolled 73,346 were promoted. On the basis of average number belonging, this figure represents 68.9 per cent. Poverty, undernourishment, illness, bad roads, heavy rains, and double enrollment are the principal causes for irregular attendance and low percentage of promotions. Nevertheless, with a 10-month school year it is possible for many children to attend a part of the year and receive the benefits of instruction, though they may not be present to receive their promotion cards at the end of the year.

Very much remains to be done for the improvement of the material conditions of the rural schools. At the present time there are 414 publicly owned rural school buildings, with 495 classrooms; and 1,117 buildings, with 1,203 rooms, are rented or granted rent free. Naturally these rented buildings, as a rule, do not meet with the standard requirements. Four hundred and ninety-nine rural schools were reported to be without modern equipment—that is, without modern individual seats and desks for pupils. Rented buildings with antiquated equipment predominate where the school population is high and where the property valuation is low, and hence municipal school funds are not available for meeting the needs of the schools.

CONSOLIDATED RURAL SCHOOLS.

During recent years this department has given an impetus to the organization of consolidated schools for the purpose of intensifying rural education, of bringing the home nearer the school, and of converting the school into a center for community and social improvement. Consolidated rural schools mark the beginning of a plan which for a long time has been in the minds of many legislators and administrators of Porto Rico for the concentration of the rural population in small villages in order to make more practicable the improvement of their present undesirable condition. Fifty municipalities have in operation consolidated rural schools totaling 149 in number, under the direction of 342 teachers. The single-room rural schools have generally no more than the first four grades, while in the consolidated school work can be offered in higher grades, sometimes including the seventh and eighth. Of the total number of consolidated rural schools in operation, 28 have fifth grades, 10 have sixth grades, 3 have seventh grades, and 2 of them have the eighth grade. The majority of these consolidated rural schools are located in 2-room buildings. There are 17 buildings with 3 rooms, and only a few have 4 rooms or more.

THE RURAL UPLIFT.

The work of the rural teacher is not limited to the school and its immediate surroundings but rather to the barrio where the school is located. Continuing the campaign for improving conditions in the country districts, the rural teacher and the special teacher of agriculture, under the direction of the district supervisor, play the leading part. Until recent years the country people had depended almost exclusively on leadership from the towns to bring about changes for the betterment in their environment. They are now learning that in the promotion of their own happiness and well-being they must depend more and more upon themselves and that the rural school forms the center of this movement.

The leading factor for improving rural conditions is the parents' association. Due to the extreme poverty and ignorance of a large part of the rural population the advancement can not be as rapid as is desired, but there is no doubt that much has been done in recent years. It is impossible to change in a few years conditions which have developed in the course of three centuries. The general interest which the people are taking in these matters is the best promise for the future. The following summary gives an idea of the work accomplished during the past year in connection with the so-called rural uplift:

Parents' associations.....	1,429
Number of meetings held.....	3,946
Total number of rural conferences.....	2,123
Total number of visits to parents' homes.....	106,009
Total number of reading centers established in rural communities.....	194
Total number of rural libraries.....	111
Total number of night schools where night sessions for illiterates were maintained without remuneration to teachers.....	117

RURAL SCHOOL CENSUS.

During the school year of 1919-20 the department took a census of the rural population of school age and of compulsory school age concerning which information was given in last year's report. In the majority of districts, some additional work has been done this year in connection with the census and the results accomplished may be judged from the following statements quoted from supervisors' reports:

The census cards have proved themselves extremely valuable, especially at the beginning of the year, in aiding the teachers in enrolling pupils. However, owing to the mobility of the population, the system rapidly loses its usefulness. It can not reach and maintain a high state of efficiency until it becomes uniform, continuous, and progressive throughout the island. (Fajardo.)

The children of the rural barrios have been properly located and the names of parents and children have been carefully recorded. (Humacao.)

The rural enrollment this year averages 84 per school. At present it is a simple task to locate any child that is not attending school. (Carolina.)

The census of the rural districts taken last year has been of great benefit to our work this year. Lists with the names of all pupils of school age were given to rural teachers at the beginning of the school year and every teacher started a campaign for a full enrollment, which resulted in a large increase in every school.

Another practical result of this census campaign was the fact that all rural teachers became acquainted with all classes of people in their respective barrios, thus bringing together the school and the home. Parents at present visit schools more frequently than heretofore which proves that they are more interested in the schools and the education of the people. (Caguas.)

The campaign last year resulted in a considerable increase in enrollment in the rural schools and made the work of the rural teachers much easier in so much as enrollment and attendance is concerned. The attendance last year showed a considerable improvement over previous years and this year seems to be much better than last. (Arroyo.)

Through the use of census cards made out last year for rural schools, the enrollment was brought up to an average of 73 children per school in the district from the start. This means a large increase over last year's enrollment. (Juncos.)

A better enrollment has been secured in each school. (Santa Isabel.)

The number belonging has been increased by over 500. Teachers have become better acquainted with parents. Attendance has improved. (Aibonito.)

The rural census helped a great deal in making out the enrollment for each school since the beginning of the school year. It helped rural teachers in locating the homes of the pupils when making out the preliminary enrollment. (Barros.)

We have been able to locate children of school age who are out of school and to trace transfers of people from one barrio to another in order to compel them to enroll their children at their new places of residence. (Juana Díaz.)

The enrollment has had a considerable increase. The cards have helped this office in enforcing the compulsory-attendance law and to find out the living places of parents and children. (Añasco.)

This office has been able to check up the delinquent parents and to maintain better attendance in the schools. This district being a coffee center, the people change their abodes often, and for this reason the data obtained by the census will be of little value in a year or two. (Lares.)

The census helped greatly in securing a good enrollment by the end of the first week of school. (Utuado.)

The fact that children of school age are rarely found along the roads during the school hours in the rural district here shows that last year's campaign gave practical results. (Camuy.)

The census aided in increasing enrollment this year by supplying necessary data to those teachers whose schools had fewer pupils than are provided for by the seating capacity of the school. (Manatí.)

ELEMENTARY GRADED SCHOOLS.

Although there were only 1,120 graded teachers provided in the insular budget, a number of municipalities paid the salaries of additional teachers. The number of positions for teachers of English is 150, but because of the low salaries paid it was not possible to find a sufficient number of legally and professionally qualified teachers to fill these positions. In order to relieve the pressure for additional schools, the executive council authorized the conversion of positions of teachers of English to English graded positions, with the result that graded teachers were employed where teachers of English should have been assigned. The total number of elementary grade groups in operation last year was 1,275, including the elementary practice school, the boys' and girls' charity schools, and the reform school. The total enrollment was 62,126; the average number belonging, 55,395; the average attendance, 52,276; the number promoted, 45,289, or 81.7 per cent of the number belonging.

On the whole, the condition of the graded schools is far more satisfactory than of those in the country. They are better housed and better equipped. The teachers as a rule have better training. Of the 380 different school buildings in urban centers, 182 are public property, whereas only 198 are rented or granted rent free. Only 6 graded-school rooms are reported without modern equipment, as against 499 school rooms in the rural barrios. The work of the graded schools has been continued along the same general lines as the year previous and no further detailed statement is considered necessary.

A total of 2,485 pupils received eighth-grade diplomas, distributed by municipalities as follows: San Juan, 296; Río Piedras, 66; Trujillo Alto, 9; Carolina, 25; Río Grande, 15; Loiza, 27; Fajardo, 30; Ceiba, 9; Luquillo, 8; Naguabo, 26; Vieques, 27; Humacao, 48; Yabucoa, 31; Maunabo, 13; Arroyo, 30; Patillas, 23; Juncos, 20; Gurabo, 12; Caguas, 53; San Lorenzo, 18; Guayama, 99; Salinas, 9; Santa Isabel, 26; Cayey, 31; Cidra, 15; Comerio, 21; Aguas Buenas, 16; Naranjito, 8; Aibonito, 27; Barranquitas, 9; Barros, 18; Coamo, 34; Juana Díaz, 19; Ponce, 184; Guayanilla, 16; Peñuelas, 19; Yauco, 49; Guanica, 30; San German, 65; Sabana Grande, 34; Cabo Rojo, 39; Lajas, 32; Mayaguez, 127; Hormigueros, 7; Maricao, 9; Las Marias, 14; Añasco, 20; Rincon, 10; Aguada, 12; Lares, 31; San Sebastian, 18; Aguadilla, 77; Moca, 9; Isabela, 19; Quebradillas, 32; Utuado, 46; Adjuntas, 36; Jayuya, 30; Camuy, 15; Hatillo, 32; Arecibo, 78; Manatí, 23; Barceloneta, 21; Ciales, 43; Vega Baja, 29; Vega Alta, 10; Morovis, 12; Toa Baja, 11; Toa Alta, 11; Dorado, 9; Bayamon, 62; Boys' Charity School, 23; Girls' Charity School, 24.

SECONDARY EDUCATION.

Continuation schools.—A continuation school is a sprouting secondary school with either the work of the ninth or of the ninth and tenth grades and in one case with that of the eleventh grade included. All of the smaller high schools are the outgrowth of continuation schools. During the past year 25 continuation schools were maintained; 16 towns had the ninth grade, 9 municipalities had both ninth and tenth grades, and the town of Lares maintained an eleventh grade. The total enrollment in these schools was 1,001, with 507 boys and 494 girls. There were 66 teachers employed.

High schools.—The department maintained 11 high schools, with a total enrollment of 2,869. Of these students there were 1,307 boys and 1,562 girls. There were employed 116 teachers.

The university high school had a total enrollment of 352, and the subcollegiate course at the college of agriculture and mechanic arts at Mayaguez of 142.

The total enrollment in the secondary schools is as follows:

Continuation schools.....	1,001
High schools (including the university high school).....	3,221
College of agriculture and mechanic arts.....	142
Total.....	4,364

In eight of the high schools both the general and the commercial courses were given. In Ponce and Aguadilla special courses for training rural teachers were offered. A total of 42 rural school licenses were issued on the basis of high school diplomas. Owing to low salaries it was difficult for the department to secure a sufficient number of properly qualified teachers for the opening of the schools and to fill vacancies which occurred during the year.

The high schools of Ponce, Mayaguez, Arecibo, Fajardo, and Humacao are housed in buildings specially constructed; but in some of these towns there is not enough room to accommodate all the students who apply for admission. The Fajardo High School is installed in a building, formerly a private residence, the gift of Dr. Santiago Veve. This building has been properly remodeled for school purposes. The Aguadilla High School, though located in a building purchased and remodeled for school purposes, is greatly in need of more room and better facilities. The high schools of Bayamon, Yauco, Caguas, and Guayama were grouped with grammar-grade rooms in an elementary school building. The municipality of Guayama is now erecting a handsome high-school structure, which will not be ready for occupation for another year. The municipality of Bayamon has remodeled an old building in which the high school is being installed for the coming school year. The Central High School of Porto Rico is still located in temporary quarters known as "Los Barracones" in Puerta de Tierra. Work on the new building at Stop 21, Santurce, has been commenced, but for the ensuing year Porto Rico's largest high school will have to remain in very unsatisfactory quarters.

The following table shows the number and kind of diplomas issued to graduates:

	General.	Commercial.	Total.
Central high school, San Juan.....	50	49	99
Fajardo.....	5	.....	5
Humacao.....	8	10	18
Caguas.....	10	8	18
Guayama.....	6	7	13
Ponce.....	29	25	54
Yauco.....	18	.....	18
Mayaguez.....	13	5	18
Aguadilla.....	15	.....	15
Arecibo.....	17	13	30
Bayamon.....	12	.....	12
University high school, Rio Piedras.....	183	117	300
Subcollegiate course, college of agriculture and mechanic arts, Mayaguez.....	46	.....	46
.....	19	.....	19
Total.....	248	117	365

THE STATUS OF ENGLISH.

From time to time adverse criticism is expressed to the effect that the results in English are not as good as they should be. Critics are apt to forget that Porto Ricans do not live in an English-speaking environment. The language of the home and of the street is Spanish. The only place where the children are able to learn English is in the public schools. It is fair to state that the schools have not made the progress in English that had been expected and that should be made, especially in the matter of correctly spoken English. Nevertheless, the quality and quantity of English possessed by the elementary-school graduate perhaps exceeds by far the ability of the average American high-school graduate to express himself either orally or in writing in any one of the modern languages taken up in the high-school course.

In last year's report the commissioner recommended an increase in the number of teachers of English to 500, with an increase in salary to \$1,800. The proportion of teachers of English from the continent has not kept pace with the increase in the number of other teachers granted by the legislature. The number of graded teachers has risen from 212 in 1900 to 1,300 provided for in the budget for the ensuing year; but the number of teachers of English has not only remained low but for a period of years actually suffered a decrease.

The following table shows the allotment of teachers from 1898-99 to 1921-22:

School year.	Rural.	Graded.	Teachers of English.	Special.	Manual training and home economics.	Continuation.	Continuation and industrial.	Agriculture.	Principals.	Supervising principals or supervisors of schools.
1898-99.....	313	212								16
1899-1900 ¹	370	212	(1)							16
1900-1901.....	409	348							39	16
1901-2.....	478	366	45	4					10	16
1902-3.....	613	393	135	8				19	46	16
1903-4.....	559	398	123	6				11	33	33
1904-5.....	560	446	93	10				9	34	34
1905-6.....	496	431	96	8					22	9
1906-7.....	569	434	94	15					17	7
1907-8.....	560	440	110	10					27	35
1908-9.....	700	550	137	13					34	35
1909-10.....	896	535	135	13				4	17	35
1910-11.....	950	575	112	13		15			15	40
1911-12.....	1,050	600	112	16			20	10	10	40
1912-13.....	1,050	630	112	20			24	10	10	41
1913-14.....	1,100	675	150	35	70		50	41	10	41
1914-15.....	1,325	825	110	20			50		10	41
1915-16.....	1,325	825	110			50			10	41
1916-17.....	1,600	825	110	12		50			10	41
1917-18.....	1,650	825	110	12		50			10	41
1918-19.....	1,700	985	110	12		50			10	41
1919-20.....	1,700	1,120	150	12		60		40	30	41
1920-21.....	1,700	1,120	150	12		60		40	20	41
1921-22.....	2,100	1,300	200	20		130		45	40	41

¹ Data for first term only.

A glance at the above table reveals the fact that the proportion of teachers of English has steadily decreased. Even for the small number of positions provided the department has not been able to secure properly qualified persons to fill them. During the past year of the 150 positions provided only 47 were filled by teachers from the continent whose native tongue is English, whereas of the 116 teachers in the high schools only 64 were from the continent. For the ensuing biennium the budget provides salaries for 200 teachers of English at \$1,125 for 10 months' service. At this time there is not the remotest possibility of filling all of these positions. In the first place the budget was passed over two months after the time the appointments to teaching positions are generally made in the United States. Second, with the low salaries provided Porto Rico can not hope to compete with the States and attract to the service here well-qualified teachers who are willing to remain more than one year. Low salaries, high traveling expenses, inability to get transportation to Porto Rico and back home, together with the high cost of living and unfavorable living conditions, make it impossible for the department to secure well-qualified teachers of English from the United States excepting those who for special reasons come for a brief period in spite of the conditions enumerated.

Barring all discussion as to method and procedure, the improvement of English from the standpoint of pronunciation alone and to give the children the opportunity to get practice with persons who speak English correctly will require a liberal increase in the number of competent teachers from the continent or the training of a large number of Porto Rican teachers in the United States.

For the first time the legislature has made an appropriation for the traveling expenses of teachers whose homes are in the States, but the amount of \$30,000 is far from adequate to pay for the transportation of 200 teachers of English and the necessary high-school teachers, in view of the high steamship rates and railroad fares. The training of American teachers does not cost the people of Porto Rico anything, and for that reason they can well afford to be more generous in the matter of salaries and traveling expenses.

There appears to be much misinformation as to where and how English is being taught in the schools. Because of the small number of American teachers the task has fallen largely to Porto Ricans. All conditions considered, they have done admirably well—certainly as well as and better than teachers of foreign languages in the schools of the United States. There is too little practice of the spoken language and there appears to be too much book English. Better spoken English can only be attained as better opportunities are being offered for acquiring it.

The regular teachers not only teach English but in English. In the first and second grades oral instruction is given. The ear and the tongue are trained first. In the third grade reading and writing are begun. The eye and the hand are trained after the ear and tongue have mastered the rudiments. In the first four grades Spanish is used as a medium of instruction, and English is taught as a special subject but by Porto Rican teachers. The fifth and sixth are the transition grades; some subjects are taught in Spanish, others in English. In the grammar grades and in the continuation and high schools English is used as a medium of instruction and Spanish is taught as a special subject. The few teachers that can be obtained from the States are assigned to the higher grades where the departmental plan is used.

Whatever future policy may be adopted with reference to the furthering of a knowledge of correct English, it is very evident that there must be a liberal increase in the number of teachers who speak this language as their native tongue.

PREVOCATIONAL INSTRUCTION.

Home economics.—Classes in home economics were held in 49 municipalities. For the first time in several years there were no vacancies in the teaching force, and all classes continued throughout the year. The work was distributed among 11 high schools, 26 continuation schools, and 12 graded schools, besides the normal school and the university high school. The total enrollment in home-economics classes during the past year was 3,536, distributed as follows: Sixth grade, 117; seventh grade, 1,027; eighth grade, 1,348; ninth grade, 669; tenth grade, 375; Normal I, 6; Normal II, 25. While the work is not generally given in the sixth grade, this may be done if facilities in any municipality allow. The work is required in the seventh, eighth, ninth, and tenth grades. Five hours weekly throughout the year are devoted to home economics, including clothing, foods, and household management.

At the beginning of the year a new course of study was introduced at the university whereby students of home economics will be granted the degree of bachelor of arts in education on the completion of a four-year course. A diploma in home economics will be issued at the end of three years of work. This change will do much toward securing a corps of better trained teachers, and the work in the elementary and high schools will improve correspondingly.

New courses of study in clothing and textiles and foods and household management were introduced in the elementary and high schools. The clothing course includes the designing and making of a complete wardrobe for the student as well as a course in textiles and laundering. The making of Porto Rican lace (pillow lace) was made a part of the course and met with great success. It is estimated that 10,000 yards were made in the regular class work. The garment work accomplished during the year was: Middy blouses, 306; tailored skirts, 304; lingerie dresses, 282; one-piece school dresses, 476; combinations (petticoat and corset cover), 563; two-piece school dresses, 846; children's combination suits, 1,008; food laboratory uniforms, 1,450; sewing aprons, 1,501; making a total of 6,736 articles of clothing.

The food course includes elementary selection and preparation of foods on the meal basis in the seventh grade; advanced selection and preparation of foods on the meal basis in the eighth grade; menu making, marketing, and the serving of meals in the ninth grade; and home nursing in the tenth grade.

In all municipalities home economics clubs were formed to take care of outside activities. These organizations were very successful in advancing the spirit of home economics through their social and civic work. In many of the towns the clubs adopted a uniform which was worn, not only in school, but also at all outside functions. This did much to create a spirit of democracy and promote the idea of simplified dressing among school girls. As a rule these uniforms consisted of pleated skirts of checked cotton suiting and white blouses or middies with either red, blue, or black ties.

Classes in needlework, embroidery, and drawn work.—These classes aim to prepare women and girls to earn a livelihood through the making of hand-made blouses, underwear, children's garments, and handkerchiefs. In these lines there is great demand for skilled workers by the firms from the States who are having these articles made in Porto Rico. This work was carried on in 32 municipalities. Twenty teachers were employed by the department of education and 12 by municipalities. A total of 2,018 students were enrolled during the year. Classes met from 4 to 6 on school days and from 9 to 11, 1 to 3, and 3 to 5 on Saturdays. Enrollment was open to women and girls over 13 years of age. The course of study covers all points of construction and decoration required in making the respective articles.

Manual arts.—The work of the manual-arts department has continued to show improvement. This fact is quite gratifying when one considers the lack of sufficient preparation of some of the teachers of this special subject and the late delivery of supplies.

In the grades the first semester is devoted entirely to the study of mechanical drawing, while in the high schools machine design and architectural drawing are offered in the first semester. During the second semester the fundamentals of woodwork are taught in the grades, while in the high schools advanced woodwork, cabinet-making, and wood turning are taught.

Classes in manual arts were held in 49 municipalities, an increase over last year of 3 municipalities, with a total enrollment of 3,270 pupils who received the benefits of this important branch of instruction. There were 182 sixth-grade boys who pursued this work in 7 municipalities; 1,003 seventh-grade boys, in 41 municipalities; 1,160 eighth-grade boys, in 48 municipalities; 628 ninth-grade boys, in 35 municipalities, and 297 tenth-grade boys, in 23 municipalities.

During the year 33 exhibitions or fairs were held, where the work of the boys of the manual arts classes was exhibited. Much interest was shown by the people in the work presented. Prizes were offered for the best work. The money for these prizes was donated in some instances by the Junior Red Cross, by local fraternal organizations, and by local subscription. As a general rule the boys show great interest in this branch, and in some cases unusual ability.

BALDORIOTY DE CASTRO GRADED AND TECHNICAL SCHOOL.

A few years ago the central grammar school of San Juan was housed in an old building on the San Francisco Plaza, originally built by the Spaniards for the first nuns in Porto Rico. Later this building was converted into barracks for a regiment of artillery, and finally, after the American occupation, the old building served as a school until 1915, when it was torn down to make room for the new school, which also received a new name, the Baldorioty de Castro Graded and Technical School.

The new building, the finest and best-appointed school building not only in Porto Rico but in the whole of the West Indies, was occupied soon after the earthquake in October, 1918. The technical school has the entire lower floor of the building, while the grammar school occupies the two upper floors.

The aim of this school is to train boys to enter the various industries of the community with some definite preparation for earning a living. It does not, however, claim to turn out finished mechanics, but is intended rather to find out what trade, if any, a boy is best fitted for, and then give him such a foundation as will prepare him to enter a trade as a superior apprentice.

Unfortunately many people have the idea that a boy loses caste socially if he earns his living by the work of his hands and the sweat of his brow. This idea is old-fashioned and does not at all hold true in this era of industrial development. This is the day of the practical man, the man who can do things. Great strides are being made in all branches of industry, and there is a tremendous demand for trained men in all lines. The purpose of this school is precisely to supply this demand and to prepare young men to enter industry, where the opportunities are legion and the financial returns much better than those realized by clerks and even by many professional men.

The Baldorioty de Castro technical school offers courses in the following trades: Machine-shop practice, printing, carpentry, architectural drawing, plumbing and gas fitting, linotype operation, cabinetmaking, and mechanical drawing.

The school is supported entirely by the municipality of San Juan at an annual cost of approximately \$25,000. It is equipped with \$22,000 worth of the most up-to-date machinery and tools, such as are found in the best manufacturing plants.

Any boy of good moral character who has completed the sixth grade may be admitted to this school and may benefit by this exceptional opportunity.

The length of the course is three years. While in the seventh grade the boy is given an opportunity to acquaint himself with the various types of occupations offered by the school, and an effort is made to ascertain his natural ability and observe his shortcomings and aptitudes. At the end of the first year, through consultation with the boy and his parents, added to the report of his teachers, an intelligent selection of one of the courses offered can be made. After a certain course has been selected the boy specializes in that for the following two years, rounding out his study by related work in mechanical drawing, mathematics, and other academic subjects.

In the seventh grade a boy spends two hours a day in the shops and four hours in academic work. In the eighth and ninth grades the daily program is planned to include three hours in the shops, one hour in mechanical drawing, and two hours of academic work.

Courses are offered in the evening to apprentices and journeymen who wish to improve themselves in their trades.

The instruction given in the night school is also entirely free and open to anyone who has ambition and energy enough to forge ahead and progress. The following courses are offered: Machine-shop practice, linotype operation, plumbing, mechanical drawing, and architectural drawing.

These courses are supplemented by lessons in arithmetic according to the need of the student.

As during past years this school has been obliged to turn away many men on account of their inability to read, write, and cipher, special classes for such men will be given next year.

INSTRUCTION IN AGRICULTURE.

The work in agriculture was carried on along the same lines as in previous years. The work consists of the practical application of the principles of scientific agriculture. Since the vast majority of the people enrolled in the rural schools are found in the first four grades and are consequently very immature, no attempt is made to have them study textbooks dealing with scientific principles, but modern agricultural theories are demonstrated and illustrated by actual practice in the school gardens. By means of the school and home gardens the department of education is trying to interest the pupils in their physical environment and to teach them the dignity of manual labor. Inasmuch as the great majority of the people must always depend upon agriculture as a means of support, either as farm laborers or as small farmers, it is of the greatest importance that modern agricultural methods not only be understood and applied but that this kind of labor be looked upon as honorable and not inconsistent with an education along other lines.

Porto Rico has supported a dense population for many years and little attempt has been made to retain or to increase the fertility of the soil. In many sections the soil has become so impoverished that it produces very poor crops. It is the tendency for each section to produce a single crop, and the people depend upon the sale of that crop for supplying all their needs. All history teaches that such a system is sure to bring disaster to those who practice it. Extension work is carried on by the teachers for the purpose of teaching the people how to use commercial fertilizers to good advantage; how to save and apply to the soil the refuse animal and vegetable matter produced on the farm; how to use green manure crops; and how to plant, cultivate, and harvest a variety of crops. They are urged to try to feed themselves from the land instead of from the store.

To show the extent and scope of the work in agriculture in the public schools, brief extracts are quoted from the reports from several districts.

RIO PIEDRAS.

Parents said at first that the use of manure was the cause of plant disease. By experiments they were taught that this is not true.

CAROLINA.

Some experiments were made on disinfection of seeds before planting, such as that of submerging the ratten of sweet potatoes in a solution of water, soap, copper sulphate, and lime so as to destroy the piche.

RIO GRANDE.

The fact that there are at present, or have been during the year, more than 5 cuerdas of land under cultivation in the school gardens of the municipality and that more than 600 home gardens have been prepared by the children in the rural zone shows clearly the scope of the work in agriculture.

FAJARDO.

Agriculture in the schools and at the homes of the pupils has been more successful than during any previous year. Many new crops have been cultivated such as mani, onions, garlic, and potatoes.

CEIBA.

The agricultural work accomplished by the schools of Ceiba this year has been more successful than during any other school year. Potatoes, onions, and garlic have been planted in some barrios and many pupils and parents learned how to cultivate these new crops.

JUNCOS.

As far as home gardens are concerned we can truthfully say that the children were enthusiastic about them and nearly all were filled with the desire to have home gardens of their own. We have in the district 625 home gardens.

CAGUAS.

Very good gardens were cultivated in the schools and at home and all kinds of vegetables and minor crops were produced. Onions and garlic were planted at all the schools and at most of them they grew well. We have tried hard to overcome the piche, the greatest enemy of the sweet potatoes, and most of the peasants are following our instructions with marked success. The selection of seeds, the right use of green and stable manures, as well as the remains of crops, have occupied much of our attention.

CAYEY.

In planting sweet potatoes we have found that by using about 10 quintals of lime per acre and disinfecting the seed with a solution of Paris green in the proportion of one-half pound to 25 liters of water production is increased 200 per cent, and the potatoes will keep about one year uninjured by the potato worm.

BARROS.

The excellent results secured in agriculture during this year were shown at the school exhibit not only by the quantity of products exhibited but also by their quality.

The effect of inoculating the soil for the planting of beans and peas was shown by means of demonstration plats.

The planting of all kinds of legumes as fertilizer was tried out successfully on all kinds of plantations, especially with bananas. Several varieties of seed, including those sent by the Department of Agriculture, were distributed among the farmers.

GUAYANILLA.

Irish potatoes were successfully grown in the school gardens and by farmers in the mountains. The farmers produced potatoes in large quantities, especially in Guayanilla, and sold them to the merchants in town.

Tomato, pepper, and eggplant seeds produced in school gardens last year were planted this year and crops secured from them.

SAN GERMAN.

The exhibition of agricultural products was an "eye opener" to many of the people, as they had no idea that so many crops could be grown here. Not only the farmers but also the people in the city made many comments to the effect that they, too, were going to have gardens.

MARICAO.

Food production in this district this year deserves special mention. After the coffee crop was gathered the farmers started making talas. The weather has been favorable for these talas this year, and large crops of beans, corn, and yautia have been harvested. The yield of minor crops has helped the farmers and peasants, as the coffee crop was light.

ANASCO.

Vegetables were raised on sandy soils near the seashore, inoculating the land with good soil, humus, and manure. Plants grew well after the inoculation.

SAN SEBASTIAN.

The distribution of Japanese sugar cane has been continued and farmers report good results. *Crotolaria juncea* has been introduced as forage and has been planted in all the school gardens and distributed among several farmers. *Agati gandiflora*, as a shade plant and as a leguminous element for the soil, has also been propagated. The cultivation of velvet, soy, and mung beans has been enthusiastically continued by many farmers. Several improved mango and aguacate seeds brought from Bayamon have been introduced into this district during the present school year.

UTUADO.

The teacher of agriculture has preached, in season and out, the selection of seeds, proper cultivation, and the importance of using animal manures, most of which had previously been allowed to go to waste. The results of this campaign are very satisfactory.

ARECIBO.

Through conversations I have had with farmers, I have come to the conclusion that our work in agriculture in the schools is producing a most beneficial influence on general methods of cultivation in the district.

MANATI.

Demonstrations have been made for the purpose of showing the advantage of using fertilizers in growing various products by contrasting fertilized plots with unfertilized. In the planting of legumes, cowpeas and velvet beans have been used in crop rotation. Special emphasis has been given to elephant grass, and Guatemala grass also has been introduced. The results of the latter are not yet certain.

CIALES.

Special mention should be made of the introduction of sudan grass and of a good kind of Dominican potato through the efforts of the teacher of agriculture. The cultivation of potatoes and improved varieties of tomatoes, peppers, eggplants, and cabbages has been encouraged with very good results. Cotton was introduced, but due to the condition of the soil it was a failure.

COROZAL.

Teachers and pupils were taught in a practical manner the preparation of the soil; also the application of ashes, manure, commercial fertilizer, tobacco stems, and decayed vegetable matter. The good quality of the products raised this year has been proof of the agricultural principle that the deeper the cultivation of the soil the better the plants will grow. Great care has also been taken this year in selecting proper soil for the different kinds of plants.

TOA BAJA.

The crop of potatoes has been successful in almost all school and home gardens. The following crops have been almost equally successful: Cabbage, garlic, pepper, corn, and eggplant.

SUMMARY.

Number of schoolrooms in which instruction in agriculture was given.....	1,715
Total number of cuerdas under cultivation in school gardens.....	443.73
Number of home gardens in urban centers.....	2,877
Number of home gardens in the country.....	36,795
Total number of home gardens.....	39,672

NATIVE INDUSTRIES.

With the aim of helping those teachers who wish to introduce handwork in native industries the course of study for the rural schools contains a series of suggestions in connection with the uses to which native fibers, grasses, sedges, seeds, dyes, gourds, and other products may be devoted. Although this kind of work is not compulsory, it has been carried on in 36 different municipalities and in 233 schoolrooms. Some of the articles made in those classes were baskets, hats, ropes, mats, curtains, lace, and embroidery. During the last two years, owing to the excellent market for these products in the United States, the making of drawn work, embroidery, and lace has been a source of considerable income to the women of Porto Rico. The teachers who established classes for this kind of work had in mind the purpose of preparing the girls to help earn their living, and in many cases the results accomplished have been very satisfactory.

SCHOOL FOR THE BLIND.

The number of pupils enrolled was 25—11 boys and 14 girls, ranging in age from 5 to 25 years. Seventeen municipalities are represented in the school. Of the pupils, 13 are totally blind and the remaining 12 are semisighted. Only six pupils were in this school last year.

All the pupils but one learned how to knit. Besides some shawls, slippers, doilies, towels, and glove and handkerchief cases, they made eight sweaters which were presented to the children at the insular sanatorium. The yarn for these sweaters was given by the Ponce Red Cross, and the buttons were bought with money given by a lady from Santurce. Six pupils learned how to read, five learned how to write Braille, and seven were in the handwriting class.

THE JUNIOR RED CROSS.

Aside from the rural campaign which has been carried on by the department in recent years, there is no other supplementary activity or agency connected with the educational work that has attained the importance of the Junior Red Cross, and it deserves corresponding credit for the various lines of meritorious work performed.

At present the chapter school committee consists of Mr. Francisco Vizcarrondo, secretary of the department of education, chairman; Miss Elsie Mae Willsey, supervisor of home economics; and Mr. Judson U. McGuire, district supervisor of schools, San Juan. Miss Beatriz Lassalle is executive secretary.

The Junior Red Cross has developed into a solid child-welfare organization, the educational value of which can not well be overestimated.

A detail of no little importance is the fact that during the first two years of its existence, when cash collections amounted to \$24,985.35, and the work increased as the war demanded, the Junior Red Cross did not spend a single cent for services. Later the services of a person to act as executive secretary of the organization became a necessity, and her salary represents the only running expenses of the chapter.

The fourth roll call took place the week beginning November 29, 1920. Over 25,000 additional children joined the organization, making a total membership of 134,670. In the following municipalities every child enrolled in the public schools is a member of the Junior Red Cross:

Carolina, Lares, Salinas, Coamo, Dorado, Toa Baja, Juncos, Barceloneta, Manati, Sabana Grande, San Lorenzo, Gurabo, Cayey, Maricao, Ensenada, San Juan, Vieques, Humacao, Yabucoa, Ponce, San German, Bayamon, Ciales, Mayaguez, Corozal, Morovis.

The school districts to which the largest sums of money were accredited during the membership drive were: San Juan, \$1,924.85; Ponce, \$1,901.05; Caguas, \$1,105; and the Cayey-Cidra district, \$1,014.25. Total cash received as membership dues amounted to \$29,122.99, the largest collection ever made.

Although all the work of the Junior Red Cross has been distinctly educational, it may be grouped under educational, social, and health activities.

EDUCATIONAL PROGRAM.

The educational activities for the year 1920-21 include the following:

Interscholar correspondence.—At the beginning of the year all the high schools and a few of the continuation schools enrolled with the interschool correspondence bureau of the American Red Cross. Through this bureau connections have been established between schools in Porto Rico and schools in the States. Most of the letters have been written in English, but a few have been written in Spanish or French, according to the special language studied by the class.

Especially interesting has been the exchange of books of snapshots prepared by the children, showing their life, homes, and schools, their work and play.

Lace contest.—Another interesting feature of the educational program of the juniors has been the lace contest held among the classes in home economics for the purpose of stimulating a revival of the lace industry of the island. District champions will hold a final contest to determine the island champion.

Home hygiene and care of the sick.—Through the efforts of the Junior Red Cross instruction in first aid and home nursing has been given to the girls enrolled in the home economics classes. One hundred copies of Home Hygiene and Care of the Sick have been distributed among the students.

Memorial Day.—The juniors distributed among the schools tiny silk American flags to be worn by the children on Decoration Day, in memory of the Porto Rican and American soldiers who lost their lives in the service of their country during the recent war.

Exhibition of pictures and films.—Besides showing three films of Junior Red Cross activities abroad, arrangements were made for the exhibition through the schools of a collection of fine prints. This exhibit was prepared by the American Federation of Arts and contained about 500 reproductions of famous paintings.

Lessons in civics for the six primary grades.—Copies of Lessons in Civics for the Six Primary Grades (Bulletin No. 9, federal department of education) were bought and distributed among the schools.

Child-welfare building.—The \$10,000 appropriated in the budget of 1920-21 for a child-welfare building has been given toward building a school for the blind.

HEALTH PROGRAM.

Dental clinics.—This year the juniors of Porto Rico have established and supported four dental clinics, each having a full-time dentist and attendant. The coming year these clinics will be turned over to the municipalities, leaving the Junior Red Cross free to establish similar clinics in other localities. About 4,000 children have received treatment in these clinics.

Fresh-air camp.—Plans have been completed for conducting a fresh-air camp during the summer. Needy children in poor health from the district of the Puerta de Tierra fire are to be taken up to the mountains for four weeks. The expenses connected with this camp are to be met by the Junior Red Cross funds.

SOCIAL PROGRAM.

Family welfare bureau.—Realizing the need of an agency devoted to family welfare, the Juniors set aside a sum to begin this work. Seven cases have been taken up and two of them settled with all the success that could be hoped for.

After the serious fire of Puerta de Tierra, when hundreds of poor people were rendered homeless, the Juniors of San Juan and other parts of the island raised a special fund, amounting to \$300, for relief of the child victims of the fire.

In addition to the activities listed above, the Junior Red Cross is aiding in the support of a day nursery established in the factory district of San Juan. It has donated \$100 to the Interscholastic Athletic Association of Porto Rico. It subsidizes a scholarship in France. The beneficiary, Edmund Grubber, a French war orphan, is attending École Bouille, Paris.

Also the Juniors have expended \$2,229 to promote agricultural and industrial exhibits and contests.

Summary.

Total membership.....	134, 670
Total receipts.....	\$41, 158. 44
Total expenditures ¹	22, 024. 79
Balance on hand:	
Cash.....	19, 345. 31
Liberty bonds.....	150. 00
War saving stamps.....	5. 00
Total.....	19, 500. 31

CHILDREN'S YEAR SURVEY.

At the request of the commissioner of education, the Children's Bureau of the United States Department of Labor sent a representative to Porto Rico in November to make a general survey of the conditions of the children of the island. A short preliminary investigation indicated to the Federal bureau the need of a more thor-

¹ Forty per cent of the total contribution from local chapter is used for home needs; \$9,283.45 has been spent in this way.

ough survey and the possible good to be attained from making such an investigation in close cooperation with the department of education and other organizations interested in the welfare of children. With this end in view the Children's Bureau has begun a children's year survey in Porto Rico along the general lines developed by the children's year campaign conducted in the States a few years ago.

PLAYGROUNDS.

Fifty municipalities have urban playgrounds and sixteen have rural playgrounds. The apparatus consists of swings, see-saws, giant strides, ladders, and horizontal bars. Many towns have tennis and basket-ball courts. Volley ball, baseball, and basket ball are favorite games in many towns.

Due to the fact that the cost of equipment has gone up considerably during the past few years there has been but a small increase in apparatus.

Number of municipalities having urban playgrounds.....	5
Number of municipalities having rural playgrounds.....	1
Municipalities having community playgrounds.....	
Recreation and athletic clubs.....	1
Amount of money spent by municipalities for playgrounds.....	\$1,327.9
Private donations.....	\$521.5

ANNUAL MEET OF THE INTERSCHOLASTIC ATHLETIC ASSOCIATION.

The tenth annual track and field meet of the Interscholastic Athletic Association of the schools of Porto Rico was held in Ponce on the 22d and 23d days of April, 1921. The contestants, according to the rules of the association, are divided into three classes, A, B, and C. This division aims to give a fair opportunity in the various events to pupils of different grades, age, and physical development. The number of contestants was as follows: Class A, 78; class B, 109; class C, 75; total, 262.

The following records were broken:

CLASS A.

High jump, Jubio Aponte, Mayaguez; height, 5 feet 7½ inches.
Shot put, William Guzman, University of Porto Rico; distance, 43 feet 9 inches.

CLASS C.

100-yard dash, Antonio Millán, Carolina; time, 11 seconds.
220-yard dash, Antonio Millán, Carolina; time, 26½ seconds.
One-half mile, A. Lind, Arroyo; time, 2 minutes 29 seconds.
High jump, J. Levy, Lares; height, 4 feet 11 inches.
Baseball throw, G. Angulo, Carolina; distance, 304 feet 7 inches.
Mile relay, Carolina district; time, 4 minutes 20 seconds.
Shot put, G. Angulo, Carolina; distance, 37½ feet.

Besides the events already mentioned, baseball and basket-ball games were played, in which some of the most important schools participated.

The big attendance at the meet and the enthusiasm continuing throughout the events was an evidence of the increasing interest of the Porto Rican youth in athletics and sports which require good health, physical strength, and fair play.

Financially the meet was a success. After all expenses were covered, a surplus of \$700 was distributed on a pro rata basis among the schools participating in the contest.

ENGLISH-SPANISH INTERHIGH-SCHOOL ORATORICAL CONTEST.

On April 22 an oratorical contest between students representing the high schools of San Juan, Ponce, Mayaguez, Arecibo, and Caguas was held in Ponce. The program was divided into two parts, the first consisting of original orations in English and the second in Spanish.

In the Spanish contest first place was won by Rafael Buscaglia, of Ponce, and second by María Leonor González, of Caguas.

In the English contest Francisco Ramírez, of Caguas, won first place and Rafael Rigual, of Mayaguez, second.

The cup which was offered as a prize to the school making the best showing in both contests was awarded to Caguas.

PRIVATE SCHOOLS.

There has been an increase of 17 per cent over last year's enrollment in the private schools of Porto Rico. There also has been a considerable increase in the number of teachers, from 187 to 244. The impetus taken by private schools during this year is due to the lack of sufficient facilities in the public schools of the urban centers, which makes it impossible to admit all the children that apply for admission, and to the fact that many of these schools, which are doing satisfactory work, have been

accredited by the department of education. Private schools applying for credit from this department are required to meet certain standards in regard to buildings, material equipment, qualifications of teachers, methods of instruction, and progress of pupils. They are inspected by officials from the department every year and must maintain a satisfactory standard of efficiency in order to continue on the accredited list. See Table VI for enrollment.

SCHOOL WEEK.

To cooperate with the United States Commissioner of Education in initiating a nation-wide campaign for the improvement of the schools and other agencies of education, the Governor of Porto Rico issued a proclamation designating the week from December 5 to 11 as "school week."

The department sent bulletins to the district supervisors and the daily newspapers, giving the principal facts and figures regarding the status of education in Porto Rico and recommendations for its improvement. The people of the various communities entered into the spirit of this campaign with great enthusiasm. The supervisors issued circular letters to teachers, and the teachers gave daily talks to the pupils and made visits to the parents, bringing home to the people the value of education, the needs of the schools of the entire island and those of their community in particular, methods of support of the school system and ways of increasing this support, and many other phases of education and the school system. Supervisors reported gaining the interest of the people by such methods as meetings on the plazas, exhibitions of school work in shop windows, distribution of fly sheets, placing of posters in public places, school parades with banners indicating the needs of the schools, talks and the flashing of information on screens at moving-picture theaters, addresses at the various churches, special public meetings, and news items and discussions in the press.

In addition, the local representatives to the legislature were personally interviewed or letters were written to them urging upon them the need of larger appropriations to carry on and improve the work of the schools, and requesting them to give their unqualified support to any measures tending to increase and extend school facilities. Appeals were made to municipal assemblies to give greater support to the schools of their community. The reports show that many of these officials promised to put forth their best efforts along these lines.

The municipal commissioners of education gave their full cooperation toward making school week a success.

Both the Rio Piedras departments of the university and the College of Agriculture and Mechanic Arts held special meetings to impress upon the students and people in general the importance of higher education and the needs of the university.

The propaganda which was spread during school week, and which will continue to be spread as a result of it, has done much toward making the people more interested in the schools, and making them realize their responsibilities in securing school facilities for all children and in improving the condition of the schools now in existence.

SCHOOL HOLIDAYS AND FESTIVALS.

The celebration of school holidays and festivals is an interesting feature of school activities and serves the double purpose of furnishing sound amusement and of establishing healthful relations between the community and the school. These celebrations also serve as a means of making people understand modern ideals of education and child protection, and form an important attraction in small towns where amusements and recreation are lacking.

The most important celebrations of the year are: The Christmas festival, designed to give the children a participation in the joys of the season, and generally organized by the teachers with the cooperation of persons interested in the children's happiness; arbor day, which has a great educational value, as this opportunity is used to stimulate the love for nature in all its beautiful forms and to teach children the necessity and duty of planting and protecting trees; and those of a civic or patriotic character, such as Washington's Birthday and Memorial Day.

The programs for commencement exercises received in this department from all the districts, and the reports of the supervisors in regard to these exercises, reveal everywhere an increasing interest in the schools.

SCHOOL LUNCH ROOMS.

The school lunch room is an institution in which people are taking notable interest as demonstrated by the increase in their number every year. The reports of the supervisors concerning the lunch rooms are very gratifying. The figures given in the table below reveal the fact that an improvement over last year has been made

which deserves due consideration. Thirteen new lunch rooms were established: there was an increase in expenditures of \$10,212.85, an increase in the number of children fed per day of 861, and the cash balance on hand was larger than that of last year by more than 100 per cent.

Number of lunch rooms.

Urban.....	57
Rural.....	8
Total.....	65
Number of lunch rooms supported by private donations.....	19
Number of lunch rooms supported by public funds.....	11
Number of lunch rooms supported by private donations and public funds.....	35

School lunch rooms.

	Number of school lunch rooms established.	Number of days lunches were served.	Average of pupils fed each day.	Total cost.	Cost per pupil per day.	Cash balance on hand June 30, 1921.
					<i>Cents.</i>	
San Juan.....	5	124	279	\$3,033.03	8.8	\$156.65
Trujillo Alto.....	1	127	20	362.00	14.0	8.00
Carolina.....	1	89	27	1206.21	8.6	191.66
Rio Grande.....	1	183	30	305.48	5.6	7.00
Loiza.....	3	121	126	711.00	4.7	119.30
Fajardo.....	1	194	115	1,758.10	7.9	1,000.00
Naguabo.....						795.22
Vieques.....	1	193	65	752.70	6.0	
Humacao.....	1	180	30	344.94	7.1	200.00
Las Piedras.....	1	180	30	613.59	11.4	7.08
Yabucoa.....	1	185	70	726.00	5.6	6.50
Arroyo.....	1	167	81	571.63	4.2	6.71
Patillas.....	1	183	60	404.31	3.7	92.43
Juncos.....	1	173	60	1,210.25	11.7	108.67
Caguas.....	1	175	65	455.00	4.0	2,253.84
San Lorenzo.....	1	125	35	393.75	9.0	300.00
Guayama.....	1	190	95	1,400.00	7.7	72.00
Salinas.....	1	187	45	898.19	10.7	386.65
Santa Isabel.....	1	192	82	839.00	7.0	103.51
Cayey.....	1	178	70	640.00	5.1	982.53
Cidra.....	1	162	20	328.69	10.0	260.48
Aibonito.....	1	190	50	² 427.13	4.5	159.98
Barranquitas.....	2	180	50	³ 415.76	4.6	285.75
Barros.....	1	192	60	345.60	3.0	
Coamo.....	1	153	55	430.89	5.1	
Juana Diaz.....	4	154	101	907.00	5.8	400.15
Ponce.....	3	180	225	1,300.00	10.6	1,650.00
Guayanilla.....	1	173	70	368.49	3.0	50.44
Penuelas.....	1	180	30	261.00	4.8	170.00
Yauco.....	1	168	50	581.18	6.9	637.38
Guanica.....	1	193	65	979.04	7.8	
San German.....	3	183	110	907.41	4.5	409.61
Sabana Grande.....	1	160	35	46.00	8.2	
Cabo Rojo.....	1	191	50	430.00	4.5	100.00
Mayaguez.....	1	190	56	478.80	4.5	216.91
Las Marias.....	1	195	40	300.00	3.8	
Anasco.....	1	103	50	248.08	4.8	37.05
Rincon.....	1	160	30	234.58	4.9	7.21
Aguada.....	1	194	35	310.11	4.6	222.89
Lares.....	1	190	50	600.00	6.3	
Isabela.....	1	80	16	80.00	6.3	2.30
Quebradillas.....	1	170	24	615.04	15.0	100.00
Utua.....	1	185	50	794.98	8.5	177.72
Jayuya.....	1	108	75	458.92	5.7	99.70
Camuy.....	1	78	33	⁴ 163.39	6.3	134.02
Hatillo.....	1	135	34	⁵ 207.78	4.5	242.02
Arecibo.....	1	170	105	1,015.38	5.7	676.25
Manati.....	1	80	4	11.00	3.0	1.40
Barceloneta.....	1	193	95	670.12	3.7	200.00
Toa Baja.....	1	194	50	797.55	8.2	64.00
Bayamon.....	1	146	92	949.49	7.0	33.00
Guainabo.....	1	103	67	494.06	8.1	35.39
Total.....	65	6162	3,242	34,812.65	6.6	13,171.40

¹ \$71.46 spent on equipment.

² \$90 spent on equipment.

³ \$151.07 spent on equipment.

⁴ \$94.53 spent on equipment.

⁵ \$104.35 spent on equipment.

⁶ Average number of days per municipality.

TEACHERS' MEETINGS AND INSTITUTES.

The department urges district supervisors to hold frequent teachers' meetings for the purpose of discussing methods. During the year the following topics were discussed in the districts of the island: Lesson plans; assignment of seat work; correcting written work; pupils' booklets; Spanish reading in the first grade; oral English; the Morin phonetic method; common errors in English and how to correct them; teaching the pupils how to study; school hygiene; home work; penmanship; how to avoid tardiness; school lunch; schoolroom decoration; physical culture; handwork and its place in the classroom; game playing; the hour plan; problem teaching; junior red cross; epidemics and preventive measures; school libraries; the school as a community center; use of the blackboard; educational measurement; motivation of school work; parents' associations; rural campaign; how to obtain the cooperation of the parents; teaching of agriculture in the rural schools; home gardens; how to improve sanitary conditions in the country.

From the great variety of subjects discussed, it is plainly seen that much good must have resulted from these meetings.

Demonstration classes were given by certain competent teachers followed by criticisms and suggestions. These classes help the teachers who have had no normal training to become acquainted with modern methods of teaching.

The following is a summary of the number and kind of meetings held in the different districts: Number of urban teachers' meetings, 790; number of rural teachers' meetings, 677; number of general meetings (rural and urban), 263.

Because of the very limited appropriation available few teachers' institutes were held under the immediate supervision of the department. However, in seven districts, where local authorities aided in the payment of expenses, three-day institutes were held. The department was represented by some of its members, who took part in the program by delivering lectures and participating in the discussions following the demonstrations by model classes.

PROFESSIONAL READING COURSES.

Five years ago the department organized professional reading courses for the teachers. The results obtained have been so successful that the department has decided to make these a permanent feature of our different school activities.

The books are sold to the teachers by the department at cost, in this way helping the teachers to acquire good books for their professional libraries.

Under the direction of the supervisors, or some special teachers of English, weekly meetings are held for the purpose of reading and discussing these books. The teachers are generally tested at the end of the year on the books read or are asked to make a résumé of a whole book.

The following books were read by the different classes of teachers:

Rural teachers: Wilkinson, Rural School Management.

Urban teachers: Strayer and Englehardt, The Classroom Teacher at Work in the American Schools.

High school and continuation school teachers: Parker, Methods of Teaching in High Schools.

Supervisors and high school principals: Monroe, Measuring the Results of Teaching.

SUMMER SCHOOLS.

The normal department of the University of Porto Rico as yet does not train teachers in numbers sufficient to meet the demand and, consequently, it is necessary to resort to other means for securing properly licensed teachers. One of these is the summer school for training candidates. The appropriation for summer schools and institutes was very meager, indeed—only \$2,000. In view of the great need of additional teachers the board of trustees of the University of Porto Rico generously made appropriations from university funds for the training of teachers during brief summer courses. A careful selection of candidates was made in advance so as to insure greater success. At Rio Piedras there were enrolled 800 students and at Mayaguez 240. Supervisors of schools who were assigned to teach during the summer session were paid their per diem from the appropriation made by the legislature. The licenses granted as a result of the examinations are included in the following schedule:

Teachers' licenses issued from July 1, 1920, to June 30, 1921.

Temporary licenses:		
English graded.....		13
Teachers of English.....		3
Total.....		16
Regular licenses:		
English graded, 4-year normal course, February, 1921.....	2	
English graded, 4-year normal course, June, 1921.....	53	
English graded, Río Piedras summer course, 1920.....	238	
English graded, examination December, 1920.....	81	
English graded, examination June, 1921.....	13	
		387
Rural course, University of Porto Rico, June, 1921.....	115	
Rural course, Ponce High School, June, 1921.....	31	
Rural course, Aguadilla High School, June, 1921.....	11	
Rural on basis of subcollegiate diploma, June, 1921.....	5	
Rural, summer course, Río Piedras, August, 1920.....	168	
Rural, summer course, Mayaguez, August, 1920.....	132	
Rural, examination December, 1920.....	46	
Rural, examination June, 1921.....	4	
		512
Teachers of English—		
Degree from a college or university.....	12	
Four years' normal training.....	42	
High school or academy diploma of previous license.....	41	
By examination.....	5	
		100
High school and special teachers—		
Degree from a college or university.....	73	
Four years' normal training.....	68	
Two years' normal training.....	24	
Upon basis of special training.....	143	
		308
Total.....		1,307

COURSES IN SPANISH FOR AMERICAN TEACHERS.

The Spanish courses for American teachers were continued this year with the following enrollment: Elementary, 29; intermediate, 11; advanced, 7. Of the total number, 34 finished their courses and were issued certificates as follows: Elementary, 18; intermediate, 11; advanced, 5. These courses include a practical study of the Spanish language and grammar, reading of not less than 12 classics out of 17 outlines in the course of study, writing of 14 essays, and a general brief study of the development of Spanish prose, poetry, and drama, with selections from the classics of each century of Spanish literature. The examinations are both written and oral. The written examination is based upon the work covered in each semester, and the oral examination includes reading, conversation about the subjects studied, and current events. A person finishing the course successfully will have attained 22 college credits in accordance with the system followed in the universities and colleges of the United States.

EDUCATIONAL TESTS AND MEASUREMENTS.

In most districts the supervisors, with the help of the teachers, conducted tests to determine the standing of the different pupils, also to compare the work of the different grades doing the same work. The supervisors report that the results were gratifying. These tests permitted the teachers to discover where lay the weak points in their teaching, and remedies for correcting defects were applied.

The following tests were given in the different school districts: Thought concentration; rapidity and accuracy; silent reading; interpretation; Ayres's spelling scale; reasoning test in arithmetic; mental arithmetic; oral English; Spanish; penmanship; translation of Spanish into English; translation of English into Spanish.

One supervisor reported that he, personally, gave tests to the children in three neighboring districts so that he could compare the work of his teachers with that of teachers of other districts.

CONSTRUCTIVE SUPERVISION.

During the past year greater effort has been made by all supervisors to improve the supervision of the teachers' work. It is the aim of the department to eliminate all destructive and to encourage constructive criticisms.

Emphasis has been put on the following plan:

1. *Teacher's lesson plan.*—It is well known that no teacher can work satisfactorily if he is not thoroughly prepared. Besides preparing himself mentally the teacher is

required to make a short practical lesson plan, including the seat work he is to give to his pupils, the aim of the new lesson, and the application of the new principle taught. For inexperienced teachers a more detailed lesson plan is required.

2. *Written work.*—All the supervisors report that more care has been taken of this important step of the recitation. Giving work to a group of pupils merely, to keep them busy while the teacher worked, with another group has been discouraged and good practical seat work having an educational value has been substituted.

3. *Pupils' booklets.*—The pupils have been required to do all their seat work in booklets, which are corrected by the teachers. By examining these booklets the supervisors can follow the progress of the pupils. The doing of written work on loose leaves of paper has been discouraged. The supervisors report that the system of pupils' booklets has not been entirely satisfactory, due to the lack of paper and pencils.

4. *The hour plan.*—In several towns the pupils of the grammar grades have worked under the hour plan if the conditions were ideal—that is, if the grade was composed of not more than 40 pupils and taught by a strong teacher. This plan, when well understood, has given satisfactory results.

5. *Problem teaching.*—The supervisors report that problem teaching has given good results where the teachers understand the method.

6. *Strengthening the work of weak teachers.*—In order to help weak and inexperienced teachers, frequent meetings have been held for the purpose of discussing methods. Model classes were given by strong teachers followed by discussion. Visiting days were granted for the purpose of observing strong teachers at work. Reports were required by the supervisors on the classes observed. The teachers have been encouraged to buy good books on pedagogy; also to subscribe to the best educational journals from the States.

SCHOOL LIBRARIES.

School libraries are now an established feature of both urban and rural schools. During the past year 100 urban school libraries were maintained in 56 municipalities. These libraries have a total of 23,278 books, 3,365 of which were acquired during the past year at a cost of \$3,576.81. Rural school libraries to the number of 200 were opened in 26 municipalities. They have a total of 3,472 books, having spent \$224.51 for the acquisition of new books during the past year.

Number of municipalities having urban school libraries.....	56
Number of urban school libraries.....	100
Number of books in urban school libraries.....	23,278
Number of books acquired this year.....	3,365
Cost of new books ¹	\$3,576.81
Number of municipalities having rural school libraries.....	26
Number of rural school libraries.....	200
Number of books in rural school libraries.....	3,472
Cost of new books ¹	\$224.51
Other libraries open to the public.....	18
Total number of books.....	58,798
Approximate number of books for children.....	12,910
Total number of books in school libraries and other libraries open to the public.....	90,446

In addition to the above list 4,903 books have been supplied for the high-school libraries which are not included in the above figures by this department.

SHORTAGE OF TEXTBOOKS AND SUPPLIES.

In the report for 1920 the commissioner called public attention to the very urgent need of more liberal appropriations for textbooks and supplies. He pointed out that during a period comprising 21 years the average cost of textbooks and supplies per pupil enrolled was only 52 cents. The appropriations for these very important items have not kept pace with increasing number of schools, and as a result the work has suffered to a very marked degree. Had the department purchased all the supplies required by the schools, the appropriation made for both items, textbooks and school supplies, would have been entirely exhausted, leaving no money for books at all. As a result of the division of funds there was a shortage of both in spite of the fact that certain municipalities purchased supplies from municipal funds.

The following quotations taken at random from reports of supervisors indicate the extent to which the schools have suffered for lack of textbooks and supplies:

"This is to inform you that the school supplies have been so scant this year that we have had no paper or pencils for several months.

"At present, the schools under my charge have not a single sheet of paper. Some teachers in their despair for lack of paper have gone so far as to buy wrapping paper in order to keep the pupils busy."—(Adjuntas.)

¹ Many books have been donated.

"Lack of paper and pencils has made it necessary for the pupils to get their own supplies. As a result the teachers have had to bear many complaints of parents who think it is not just to make them spend so much money on school supplies when they can hardly afford it."—(Juncos.)

"In many of the schools they have had no books at all, especially in the lower grades. In other grades the books have been so old and in such poor condition that only about one-half of the children had satisfactory books."—(San German.)

"In manual training the work of the first semester was practically omitted for lack of sufficient supplies, most of which could have been purchased in San Juan, although requisitions for supplies were made out early in the year so as to allow for delay in purchase and delivery of the same.

"We are very, very short of readers for the lower grades.

"As regards geographies and supplementary readers we have reached a crisis, as it will be impossible to continue with the books we have. Unless we are given an entire new supply of these books and a very liberal additional supply of physiologies, the children will be without these texts next year, as the present supply has reached such an advanced stage of disintegration that it will be impossible to use them another year."—(San Juan.)

"Our supply of paper ended at the beginning of the first week of the second semester. Many schools have bought common paper in the stores at teachers' and pupils' expense in order to carry out the work. Written work has suffered greatly in the lower grades for lack of properly ruled paper."—(Isabela.)

"The schools of this district have suffered about 25 per cent due to lack of sufficient and proper textbooks. This district has had a moderate amount of supplies to complete the school year."—(Lares.)

"Textbooks of practically all kinds have been insufficient for the number of children in the different grades as could be clearly seen from the report submitted to the department at the end of the first semester."—(Naguabo.)

"Insufficiency of textbooks and supplies in all schools of the district has been a real calamity."—(Toa Baja.)

"No other irregularity has contributed more to the difficulties encountered and the embarrassing situations confronted by the teachers of this district, particularly the beginners in the profession, as the insufficiency of textbooks and the shortage of supplies with which to furnish all the pupils."—(Coamo.)

"The lack of textbooks and supplies during the present school year has been a great hindrance to the progress of the schools of this district."—(Corozal.)

"Many schools where texts should be in the hands of every pupil have but one of certain classes for the use of the teacher only. Sufficient materials, paper and pencils, have been provided constantly throughout the year by the two municipalities for the use of the schools—a bare sufficiency, but enough to squeeze through the year, with no allowance, however, for special needs."—(Manati.)

"The shortage of textbooks or the poor condition in which many of them are, has been a great hindrance to the proper carrying out of the work assigned by the course of study."—(Rio Grande.)

"More than one-half of the number of books we have been using are in very poor condition, and these were sufficient to supply one-third, and in some instances one-fourth, of the number of pupils in each grade.

"The great scarcity of school supplies did not permit furnishing the pupils with the necessary materials for the final examinations, and we were obliged to hold oral examinations in most of the rural schools."—(Barros.)

"The work suffered somewhat because of late delivery of supplies and also because of lack of supplies, such as practice paper and pencils, drawing supplies, and several textbooks, but the deficiency was every time made up the best we could. Pupils would buy their own supplies at the cost, of course, of much complaining on the part of the parents."—(Ponce.)

"The work of the schools for the whole year has been retarded because of lack of textbooks and certain supplies, especially paper. Probably the writing has suffered more than any other subject, because the supply of paper has been insufficient, although all the other subjects have suffered."—(Cabo Rojo.)

"The children have had to supply their own paper and pencils. In some cases this has been a hardship. We had paper for the final examinations because I had saved a little from the beginning of the year."—(Rio Piedras.)

"The lack of textbooks and supplies has greatly affected the work of the schools in this district. In some schools we had half of the books we needed for the pupils."—(Aibonito.)

"The schools of this district have suffered considerably during this school year through the lack of school supplies, such as paper, pencils, and crayon."—(Anasco.)

"We did not have enough textbooks to supply all the schools since the beginning of the year. We had saved much expendable material from the previous year, so that we had sufficient throughout this year."—(Mayaguez.)

"The work in the grades of the elementary school has suffered, specially due to the lack and late delivery of supplies. There has been a great shortage of paper, notebooks, pencils, and ink during the whole school year.

"New textbooks to replace those in use are greatly needed. There are many books in a very poor condition." (Bayamon.)

"Most of the books are so worn and torn that they are unfit for work."—(Juana Diaz.)

LEGISLATION.

During the first session of the Tenth Legislative Assembly of Porto Rico no legislation was enacted to affect the present organization of the work or the status of teachers.

A number of bills were passed carrying no-fiscal year appropriations providing for the construction of school buildings. It is very doubtful if this money will be available in the near future and if the proposed work can be carried out. One of the most important pieces of legislation enacted is the law providing for a bond issue of \$1,000,000 to provide funds for the purchase of building sites and for the construction and equipment of rural school buildings in those municipalities that are unable to do so within a reasonable time from their own resources. Porto Rico is still in need of hundreds of properly constructed rural school buildings, especially in those municipalities where the property valuation is low and the school population high, and where, consequently, municipalities are unable to provide funds from their own resources for erecting them. In case the bonds provided for in the law mentioned find a market this act may be considered as one of the most important ever passed by any legislature in Porto Rico toward providing school extension and proper facilities.

The education budget for the ensuing year is the most liberal ever passed by any legislature. Though the amounts appropriated for certain items, such as textbooks and supplies, are far from adequate and though teachers' salaries continue to remain modest, the legislature has granted the most liberal increase in the number of positions thus far on record in Porto Rico. The increases in teaching positions over those of the year just ended is apparent from the following table:

Class of teachers.	Number, 1920-21.	Number granted.	Increase.
Principals.....	20	40	20
English and Spanish graded.....	1,120	1,300	180
Rural teachers.....	1,700	2,100	400
Teachers of English.....	150	200	50
Continuation teachers.....	60	130	70
Special teachers of agriculture.....	40	45	5
Special teachers of needlework and embroidery.....	20	50	30
Special teachers of music, drawing, and physical training.....	11	20	9
Total.....	3,121	3,885	764

Unfortunately, teachers' salaries remain low and are as follows for 10 months' service:

Principals, teachers of English, continuation teachers, special teachers of agriculture, \$1,125; graded teachers, \$900; rural teachers, \$702; teachers of needlework and embroidery, \$520; special teachers of music, drawing, and physical education, \$1,000. Graded teachers acting as principals receive an additional allowance of \$100. The total appropriation for the salaries of the teachers of 12 high schools is only \$191,000.

PORTO RICO SCHOOL REVIEW.

The Porto Rico School Review, a professional monthly devoted to the interests of education in Porto Rico, has completed its fifth year of successful existence. This magazine is favorably recognized as an educational publication, not only in the United States but in Latin-American countries. Its success is largely due to the fact that it has been kept entirely free from personal and political matters. No remuneration whatever is paid the editorial staff.

Financial statement, 1920-21.

Receipts:	
Subscriptions.....	\$2,997.00
Advertisements.....	1,004.48
Balance from 1920-21.....	852.46
Total.....	4,833.94
Disbursements:	
Printing.....	3,687.02
Postage.....	158.15
Miscellaneous.....	150.00
Total.....	3,995.17
Total receipts.....	4,833.94
Total disbursements.....	3,995.17
Balance on hand.....	838.77

PORTO RICAN STUDENTS STUDYING IN THE UNITED STATES.

During the past year a liberal number of Porto Rican students pursued studies in the United States. It is a matter of regret that a larger number of ambitious young men and young women do not have the means to continue their education on the continent. Following is a detailed statement of these students classified with reference to the studies pursued:

Common-school work, 12; high school, 38; liberal arts, 13; chemistry, 7; medicine, 94; dentistry, 30; journalism, 1; engineering, 53; business, 58; theology, 2; law, 18; pharmacy, 21; military science, 2; nautical science, 5; agriculture, 3; preparatory courses, 16; domestic science, 2; wireless telegraphy, 1; painting, 1; aviation, 1; education, 4; optometry, 1; kind of studies not reported, 7, making a total of 386 students.

DEPARTMENT PUBLICATIONS.

During the school year 1920-21 the department issued 106 circular letters dealing with administrative matters. The following printed bulletins were issued:

- Bulletin of General Information on positions open to teachers of the United States.
- Laboratory Directions, High School Zoology, by George Edwin Johnson, M. S., professor of biology, University of Porto Rico.
- Outline of the Municipal Law and the Organic Act of Porto Rico and a Comparative Study of the Government of the United States and Porto Rico, by Francisco Vizcarrondo, secretary of the department of education.
- Course of Music for the Public Schools, by Allena Luce, professor of music, University of Porto Rico, Rio Piedras.
- Professional Bulletin for the Public Schools of Porto Rico, prepared by the division of supervision.
- Outline of Course in Spanish for the American Teachers.
- Positions Open to American Teachers, published by the department.
- Si Tuviere 21 años, lecture delivered by Mr. J. B. Huyke in the Y. M. C. A. and published by the department.
- Teachers' Manual for First Grade Oral English, by Joseph C. Morin, general superintendent.
- Course of Study in Home Economics for the Elementary and High Schools of Porto Rico, by Elsie Mae Wilsey, supervisor of home economics.
- Curso de Estudios en Costura, Calado y Bordado para las escuelas de Puerto Rico by Elsie Mae Wilsey, supervisor of home economics.

SUMMARIZED STATEMENT OF SCHOOL BUILDINGS AND SITES.

1. Total number of buildings completed during the year: Urban—9 buildings with 26 rooms; one 1-room addition. Rural—10 buildings with 12 rooms; two 1-room additions.
- *2. Total number of buildings commenced during the year and now in course of construction: Urban—3 buildings with 53 rooms which include one 22-room high-school building in Guayama and a 23-room high school in San Juan. Rural—2 buildings with 3 rooms.
3. Total number of sites acquired during the course of the year: Urban—3 sites. Rural—8 sites.
4. Special enumeration of sites donated: Urban—Rio Piedras, one site by Deogracias Viera. Rural—Bayamon, one site by Manuel Torres; Caguas, one site by Sandoval Marciano; Guanica, one site by Antonilo Almodovar; Hatillo, one site by Manuel A. Rivera.
5. Towns in which no school buildings of any kind have been erected since the change of sovereignty: In urban centers—Ceiba, Juncos, Jayuya, Morovis, Dorado, and Guaynabo. In rural districts—Loiza, Fajardo, Luquillo, Hormigueros, and Rincon.

School buildings.

I.—TOTAL NUMBER OF BUILDINGS.

	Public property.	Rented or granted rent free.	Total.
Used for urban schools.....	182	198	380
Used for rural schools.....	414	1,117	1,531
Total.....	596	1,315	1,911

II.—PUBLIC PROPERTY.

	Urban.	Rural.	Total.		Urban.	Rural.	Total.
Number of buildings having—				Number of buildings having—			
1 room.....	32	346	378	12 rooms.....	10	.....	10
2 rooms.....	29	62	91	14 rooms.....	3	.....	3
3 rooms.....	7	1	8	16 rooms.....	9	.....	9
4 rooms.....	30	3	33	18 rooms.....	1	.....	1
5 rooms.....	10	2	12	20 rooms.....	2	.....	2
6 rooms.....	22	.....	22	21 rooms.....	1	.....	1
7 rooms.....	2	.....	2	22 rooms.....	1	.....	1
8 rooms.....	18	.....	18	25 rooms.....	1	.....	1
9 rooms.....	1	.....	1	Total.....	182	495	677
10 rooms.....	2	.....	2				
11 rooms.....	1	.....	1				

III.—TOTAL NUMBER OF SCHOOLROOMS.

	Public property.	Rented or granted rent free.	Total.
In buildings used for urban schools.....	1,043	425	1,468
In buildings used for rural schools.....	495	1,203	1,698
Total.....	1,538	1,628	3,166

ILLITERACY IN PORTO RICO.

The Federal census bureau classifies as illiterate any person 10 years of age or over who is unable to write in any language, regardless of ability to read. Three Federal censuses have been taken in Porto Rico—in 1899, in 1910, and in 1920. The population of Porto Rico has shown a rapid increase from 1899, when there were 953,243 inhabitants, to 1920, when the total numbered 1,299,809. In this same period the total number of persons between 5 and 17 years of age grew from 322,393 to 438,743, or a total increase of 116,350 children of school age. This increase alone represents more than four times the total number of children attending school in 1899.

In 1920 the total urban population amounted to 283,934 and the rural population to 1,015,875. All towns and villages with a population of less than 2,500 were included in the rural zone. The census of 1899 showed that 79.6 per cent of the people of Porto Rico 10 years of age and over were illiterate. This figure was reduced to 66.5 per cent in 1910 and to 55 per cent in 1920. In 1899 only 8 per cent of the persons 5 to 17 years of age were attending school; in 1920, 45.2 per cent are reported in school, as is shown by the following table:

School attendance and illiteracy as shown by the censuses of 1899, 1910, and 1920.

Census of—	Total population.	Total number of persons 5 to 17 years.	Total number of persons attending school.	Percentage of persons 5 to 17 years attending school.	Percentage of illiteracy in population 10 years and over.
1920.....	1,299,809	438,743	206,533	45.2	55.0
1910.....	1,118,012	361,967	132,349	35.2	66.5
1899.....	953,243	322,393	26,212	8.0	79.6
Increase from 1899 to 1920.....	346,566	116,350	180,321	37.2	124.6

¹Decrease.

The great majority of the people of Porto Rico live in the country districts. Their illiteracy can only be reduced through the rural school. In judging the reduction of illiteracy in the rural barrios it is fair to consider that the rapid increase of rural schools has come only in recent years. During the school year 1910-11, when the census of 1910 was taken, there were but 950 rural schools in Porto Rico as against 1,700 in operation in 1920. This means that the great mass of the adult population has not been reached by the schools, as is testified by the census figures. On the other hand, school facilities have been best in the cities and have been provided most rapidly for the urban population. Of the urban population from 10 to 20 years of age in 1920, there remain only 13,695 illiterates, whereas those 21 years and over number 60,302. The group where illiteracy is the lowest is that of the urban population comprised between 10 and 15 years of age, where the percentage has been reduced to 17. These figures can mean only one thing, namely, that the schools are giving results, and results that are highly gratifying considering the low per capita expenditure of funds for educational purposes and considering the very high degree of illiteracy until 21 years ago.

The rural population from 5 to 20 years of age in 1920 was 416,207. The number of illiterates comprised between these ages was 102,160, whereas the great bulk of illiterates in the rural population, amounting to 320,932, were 21 years old and over. The total enrollment in the rural schools of Porto Rico in 1921 was 119,947, which is far below the total number of children of school age to be found in rural barrios. The fact that the total number of illiterates in the rural population between the ages of 5 and 20 years is only 102,160 proves that many rural children who are not in school have been in school and have learned how to read and write, however limited their elementary education may have been otherwise.

It is to be presumed that, in general, educational results are in proportion to educational expenditures. The census figures point to this conclusion. In the municipality of San Juan, where the greatest proportional expenditures for education have been made, where the best school buildings and equipment have been provided, the percentage of illiteracy is only 26.1. It should be stated, however, that other factors have operated to produce this low percentage in San Juan. This municipality has received large accretions to its population from the outside. Naturally, the more intelligent outsiders sought better opportunities in San Juan. Nevertheless, the records made by Mayaguez (42.4), Ponce (44.1), Bayamon (46.3), Rio Piedras (48.3), and other municipalities show, in general, that illiteracy has been reduced to the greatest extent where expenditures have been the highest. On the other hand, the highest degree of illiteracy is to be found in the mountain municipalities, where the property values are low and the school population is high and where the amounts available for education have been hopelessly inadequate. Among these municipalities may be cited Cidra (71.6), Moca (69.5), Villalba (69.1), Las Piedras (67.1), Naranjito (66.5), Aguas Buenas (66.1), Ciales (66.1).

The following table shows the total number of persons 10 years of age and over, the number illiterate, the per cent illiterate in 1910, and the per cent illiterate in 1920:

	Total 10 years of age and over.	Number illiterate.	Per cent illiterate in 1910.	Per cent illiterate in 1920.
Total.....	904,423	497,089	66.5	55.0
Adjuntas.....	12,298	7,254	74.3	59.0
Aguada.....	8,819	6,110	79.4	69.3
Aguadilla.....	16,974	8,779	59.8	51.7
Aguas Buenas.....	7,066	4,674	80.7	66.1
Aibonito.....	9,072	5,269	68.7	58.1
Anasco.....	9,817	5,803	66.8	59.1
Arecibo.....	33,010	18,863	70.0	57.1
Arroyo.....	5,167	2,963	60.4	57.3
Barceloneta.....	9,306	6,114	74.2	65.7
Barranquitas.....	7,499	4,067	72.2	54.2
Barros.....	10,135	5,860	77.9	57.8
Bayamon.....	21,921	10,151	60.0	46.3
Cabo Rojo.....	15,548	8,057	62.9	51.8
Caguas.....	45,460	14,761	67.3	58.0
Camuy.....	9,680	5,727	71.5	59.2
Carolina.....	10,406	5,813	69.9	55.9
Cayey.....	16,692	10,163	67.0	60.9
Ceiba.....	4,084	2,596	.....	63.8
Ciales.....	13,508	8,930	74.9	66.1
Cidra.....	9,776	7,003	76.2	71.6
Coamo.....	12,269	6,658	65.5	54.3
Comerio.....	9,657	6,217	76.5	64.4

	Total 10 years of age and over.	Number illiterate.	Per cent illiterate in 1910.	Per cent illiterate in 1920.
Corozal.....	9,198	5,775	77.2	62.8
Culebra.....	535	245	41.9	45.8
Dorado.....	4,028	2,352	73.6	58.4
Fajardo.....	10,314	5,158	63.7	50.0
Guanica.....	7,101	3,377	77.2	47.6
Guayama.....	14,168	7,078	58.3	50.0
Guayanilla.....	8,261	4,627	69.9	56.0
Guaynabo.....	7,141	4,660	75.5	65.3
Gurabo.....	8,563	5,424	75.5	60.7
Hatillo.....	9,368	5,689	75.7	58.4
Hormigueros.....	3,212	1,877	72.8	57.4
Humacao.....	14,100	8,089	74.2	63.7
Isabela.....	13,688	8,682	74.2	64.0
Jayuya.....	8,425	5,394	71.6	58.7
Juan Diaz.....	13,158	7,729	68.6	60.4
Juncos.....	9,110	5,498	62.8	48.7
Lajas.....	8,202	3,998	75.7	59.8
Lares.....	17,100	10,223	69.2	55.9
Las Marias.....	7,237	4,047	67.1	61.3
Las Piedras.....	6,898	1,629	71.5	58.0
Loiza.....	10,386	6,024	70.0	52.3
Luquillo.....	4,251	2,612	73.8	65.3
Manati.....	13,946	8,474	51.4	42.4
Maricao.....	5,768	3,016	79.4	69.5
Maunabo.....	5,264	3,437	74.6	64.3
Mayaguez.....	31,281	13,267	73.4	59.0
Moca.....	10,785	7,500	79.6	66.5
Morovis.....	9,364	6,019	73.6	65.0
Naguabo.....	10,821	6,387	74.0	59.9
Naranjito.....	6,791	4,519	54.3	44.1
Patillas.....	9,770	6,352	67.7	56.7
Penuelas.....	9,211	5,518	81.4	63.8
Ponce.....	53,554	23,624	70.0	54.2
Quebradillas.....	6,391	3,623	64.0	48.3
Rincon.....	5,925	3,783	67.0	56.9
Rio Grande.....	8,695	4,715	67.8	50.2
Rio Piedras.....	16,342	7,892	62.9	51.3
Sabana Grande.....	8,451	4,806	73.0	59.6
Salinas.....	9,537	4,786	60.6	51.3
San German.....	16,713	8,582	74.3	62.1
San Juan.....	55,806	14,559	79.4	62.4
San Lorenzo.....	11,884	7,420	73.0	59.6
San Sebastian.....	14,638	8,731	60.6	51.3
Santa Isabel.....	5,493	2,817	74.3	62.1
Toa Alta.....	6,746	4,192	62.8	50.6
Toa Baja.....	4,931	2,493	69.7	59.5
Trujillo Alto.....	4,767	2,835	74.8	59.6
Utua.....	23,588	14,051	74.7	63.9
Vega Alta.....	6,504	4,157	71.7	58.0
Vega Baja.....	10,682	6,200	60.6	51.4
Vieques.....	8,346	4,288	69.1	59.5
Villalba.....	8,743	6,040	77.7	56.5
Yabucoa.....	13,345	7,943	66.2	
Yauco.....	17,772	10,045		

NEED OF EQUITABLE DISTRIBUTION OF SCHOOL FUNDS.

One of the ideals toward which the American people are constantly striving in matters of public education is to give equity of opportunity to every child and to require equity of responsibility of every adult. One of the means employed toward attaining this ideal is the distribution of school funds on an equitable basis. In the United States the principle of State aid to stimulate local effort has long been in vogue. In the attempt to raise educational standards the principle of State aid fails to take into consideration one very important factor, namely, the needs of the local community without reference to its taxable wealth. In practice State aid goes to the community best able to help itself, the one that is financially able to meet the standards imposed by the State authorities as a requisite for granting State aid. On the other hand, the poor and weak community, unable to meet these standards, does not get any help at all. In other words, the principle of State aid as at present put into practice tends to help the strong and to neglect the weak.

Fortunately in Porto Rico teachers' salaries have been paid from the insular treasury since 1899, and a uniform standard of salaries has been maintained. Were the municipalities required to pay teachers' salaries, many of the poor communities which now enjoy the benefits of a liberal number of schools could not have been pro-

vided with the same number from their own resources. In practically all the poor municipalities, those where property values are low and the school population is high, municipal effort toward providing buildings and equipment lags far behind the provisions made by the insular government for teachers' salaries. The commissioner of education has repeatedly called attention to the great disparity in municipal school funds based on the number of children of school age, because in Porto Rico population is densest where land values are lowest. The Porto Rican child is born a citizen of the State and not of a given municipality. He is not a fixed entity in the community, such as is the street or plaza.

It therefore appears reasonable to try to bring about a distribution of municipal school funds upon the basis of needs rather than upon that of property valuation. This equitable distribution would not in any way violate the sacred rights of municipal autonomy. If it is just and proper to tax the people of Villalba to pay for the construction and maintenance of a highway or bridge in the municipality of Arecibo, it appears right and proper that the people of Arecibo should be willing to be taxed for providing more ample school facilities for the children of Villalba.

The people of Porto Rico will not be able to promote school extension to meet the needs of the thousands of children whose homes at present are in poor municipalities unless there is a readjustment in the distribution of school funds.

The department has made a study of the funds available by municipalities per child of school age. The results are expressed in the following summary, which is evidence sufficient that the children of the thickly populated mountain municipalities do not and can not have the same equity of opportunity for receiving the benefits of an education as do the children of those municipalities where the property values are high.

Municipal school funds available per child of school age, 1920-21.

Municipality.	Amount available for each child.	Municipality.	Amount available for each child.
Adjuntas.....	\$1.20	Lares.....	\$1.03
Aguada.....	1.72	Las Marias.....	1.36
Aguadilla.....	1.01	Las Piedras.....	1.26
Agua Buenas.....	.72	Loiza.....	2.38
Aibonito.....	1.08	Luquillo.....	1.93
Anasco.....	1.54	Manati.....	1.88
Arecibo.....	2.08	Maricao.....	1.82
Arroyo.....	3.13	Maunabo.....	1.35
Barceloneta.....	2.19	Mayaguez.....	1.99
Barranquitas.....	.62	Moca.....	.65
Barros.....	.67	Morovis.....	.68
Bayamon.....	1.71	Naguabo.....	1.67
Cabo Rojo.....	1.28	Naranjito.....	.55
Caguas.....	1.88	Patillas.....	1.12
Camuy.....	1.34	Penuelas.....	1.01
Carolina.....	1.97	Ponce.....	2.82
Cavey.....	1.42	Quebradillas.....	1.03
Ceiba.....	1.65	Rincon.....	1.26
Ciales.....	1.06	Rio Grande.....	1.71
Cidra.....	.76	Rio Piedras.....	2.56
Coamo.....	1.10	Sabana Grande.....	.74
Comerio.....	1.52	Salinas.....	4.77
Corozal.....	.60	San German.....	1.27
Dorado.....	2.87	San Juan.....	6.64
Fajardo.....	3.46	San Lorenzo.....	.92
Guanica.....	6.51	San Sebastian.....	.94
Guayama.....	2.95	Santa Isabel.....	5.16
Guayanilla.....	1.86	Toa Alta.....	.96
Guainabo.....	1.15	Toa Baja.....	3.71
Gurabo.....	1.24	Trujillo Alto.....	1.57
Hatillo.....	1.31	Utua.....	.93
Hormigueros.....	2.50	Vega Alta.....	2.38
Humacao.....	2.47	Vega Baja.....	1.78
Isabela.....	.71	Vieques.....	3.40
Jayuya.....	1.10	Villalba.....	.68
Juana Diaz.....	2.21	Yabucoa.....	2.35
Juncos.....	1.65	Yauco.....	1.22
Lajas.....	1.77		

RECOMMENDATIONS.

1. In view of the readjustments of the school curriculum which are now under way in many school systems of the United States, the course of study for the public schools should be changed from its present division, comprising an elementary school with eight years of instruction and a high school with four, to a uniform elementary course of six years, followed by a diversified intermediate course of three years and a further diversified high-school course of three years. In other words, the present 8-4 plan should be changed to a 6-3-3 plan. This proposed arrangement would result in greater economy in elementary school expenditures and at the same time those pupils who are able to continue their studies would have the benefit of diversified courses adapted to their future needs. Although the commissioner of education is authorized by law to establish a public-school system, the proposed changes can not be made without corresponding changes in the insular budget, providing for classification and salaries of teachers.

2. A further liberal increase in teachers' salaries is urgently needed for all classes, and particularly for certain special teachers, such as teachers of English, manual training, home economics, agriculture, and of all high-school subjects. The following scale of salaries is recommended:

Rural teachers.....	\$1,000
English graded teachers.....	1,200
Principals.....	1,600
Teachers of English.....	1,800
High-school teachers:	
Minimum.....	1,500
Maximum.....	2,500
High-school principals:	
Minimum.....	1,800
Maximum.....	3,500
District supervisors:	
First class.....	3,500
Second class.....	2,750
Third class.....	2,000

In the case of teachers coming from the United States ample provision should be made for their traveling expenses in addition to a remuneration sufficient to enable Porto Rico to compete with the States in securing teachers with high qualifications.

3. The number of teachers of English should be increased to 500 and the number of district supervisors to 50.

4. The positions of special supervisors of music and drawing that existed some years ago should be restored in order that these subjects may have the benefit of expert direction.

5. The rural-school course of study should be lengthened to six years. The double enrollment plan in rural schools should be eliminated and provision should be made for a sufficient number of teachers so as to limit the enrollment in all schools to 40 pupils.

6. Proper medical inspection and physical examination of all school children, at the expense of the insular government, should be introduced as rapidly as means may permit, including provision for school nurses as well as school physicians.

7. Provision should be made for truant officers, so as to carry out effectively the present compulsory education law and the law concerning child labor.

8. Efforts should be made to secure the distribution of municipal school funds on the basis of needs, that is, on the basis of the number of children of school age rather than upon the property valuation.

9. There is perhaps no State in the Union where vocational education is so necessary as in Porto Rico. The Federal vocational education act is not made applicable to Porto Rico. This act should be extended to Porto Rico or else provision should be made for aid to vocational education in a general act of Congress providing assistance from the Federal Government.

10. Any general act that may be passed by Congress providing Federal aid for the support and extension of public education in the United States should also be made applicable to Porto Rico. The people of Porto Rico, upon whom American citizenship was conferred March 2, 1917, are fully entitled to the benefits of future legislation in this direction.

11. The system of making government purchases should be radically changed, which means that a new law should be enacted in place of Joint Resolution No. 14, approved April 13, 1916. This change is necessary to save time for the government and to promote efficiency and promptness in the matter of making purchases for the several departments. The system at present in use is too cumbersome, involves too much red tape, and causes a great deal of waste of time. Time is money for the government as for anyone else. Where supplies needed for the service are not delivered

in time to be used by those who are on the pay roll, a positive waste and inefficient service rather than a saving result. A system under which it requires from 6 to 12 months to deliver such common articles as nails, typewriter ribbons, chairs, ovens, scissors, filing cases, paper racks, lumber, and other supplies, all purchased in the local market, should be eliminated as speedily as possible "for the good of the service."

12. The organic act should be amended so as to provide for holding the regular session of the legislature earlier in the season and the definite approval of the budget not later than March 15. When the departments do not know the resources available for carrying on their work until the close of the fiscal year, it is impossible to plan the work of the succeeding year properly, especially in the matter of securing teachers, books, and supplies from the United States.

TABLE 1.—*Administrative and supervisory staff, 1920-21.*

Paul G. Miller, commissioner of education.
 Carey Hickie, assistant commissioner.
 Francisco Vizcarrondo, secretary and chief division of supervision and records.
 George A. Harriman, chief, division of property and accounts.
 A. González Font, chief, bureau of municipal school affairs.
 Vacant, general superintendent.
 Joseph C. Morin, general superintendent.
 Gerardo Sellés Solá, general superintendent of Spanish.
 George C. Ure, supervisor of manual arts.
 A. J. Sykes, supervisor of agriculture.
 Elsie Mae Willsey, supervisor of home economics.
 University of Porto Rico:
 Paul G. Miller, chancellor.
 C. E. Horne, dean, College of Agriculture and Mechanic Arts, Mayaguez.
 Charles W. St. John, dean, Rio Piedras departments.
 C. M. Griffith, secretary-treasurer.

SCHOOL DISTRICTS AND SUPERVISORS.

MUNICIPAL COMMISSIONERS OF EDUCATION, 1920-21.

(Omitted. Lists are on file at office of the commissioner of education, San Juan, and the Bureau of Insular Affairs, War Department.)

TABLE II.—*Summary of statistics for the school year 1920-21.*

Number of different pupils enrolled in all publicly supported schools classified by color and sex:

White—	
Male.....	84,505
Female.....	66,555
Total.....	151,060
Colored—	
Male.....	21,173
Female.....	17,374
Total.....	38,547
By sex—	
Male.....	105,677
Female.....	83,930
Total.....	189,607
By color—	
White.....	151,060
Colored.....	38,547
Total.....	189,607
Not classified by color and sex:	
University, college departments.....	565
Summer schools.....	1,040
Needlework and embroidery.....	2,018
Rehabilitation service.....	39
Total.....	3,662
Grand total.....	193,269

Total number of different persons who have enrolled for instruction in publicly supported educational institutions during the year 1920-21:

In schools supported from department of education and municipal budgets—	
Rural.....	119,947
Elementary graded.....	60,846
Secondary—	
Continuation.....	1,001
High schools.....	2,869
Needlework and embroidery.....	2,018
School for blind.....	25
Night schools—	
Elementary.....	2,987
Technical.....	158
Total.....	189,851
In other publicly supported schools—	
Special elementary—	
Boys' charity school.....	398
Girls' charity school.....	264
Reform school.....	277
University of Porto Rico—	
Rio Piedras departments—	
College of liberal arts.....	39
College of law.....	57
College of pharmacy.....	46
Normal college.....	
Course for training rural teachers.....	177
Course for high-school graduates.....	110
College specials.....	17
High school.....	352
Elementary practice school.....	341
Summer session.....	800
Total at Rio Piedras.....	1,939
College of agriculture and mechanic arts, Mayaguez—	
Collegiate—	
Agriculture.....	16
Engineering.....	15
Sugar chemistry.....	10
General science.....	10
Special.....	7
Freshmen.....	61
Subcollegiates.....	142
Rehabilitation service.....	39
Summer session.....	240
Total at Mayaguez.....	540
Total at university.....	2,479
Total in public institutions.....	193,269
In private schools.....	6,818
Total number of persons enrolled in school.....	200,087
Average number belonging in public schools—	
Rural schools.....	105,455
Elementary graded schools.....	55,418
Secondary schools.....	3,846
Night schools.....	2,398
Total.....	168,117
Average daily attendance in public schools—	
Rural schools.....	98,648
Elementary graded schools.....	53,298
Secondary schools.....	3,605
Night schools.....	2,000
Total.....	157,551
Average number of days schools were in session:	
Secondary.....	190
Elementary graded.....	182.5
Rural.....	182.4
Night.....	60.9
General average.....	183
Aggregate attendance in days:	
Secondary.....	684,972
Elementary—	
Graded.....	9,726,310
Rural.....	17,994,501
Night.....	121,814
	27,842,625

Aggregate number of days schools were in session:

Secondary.....		7,212
Elementary—		
Graded.....	232,854	
Rural.....	310,461	
Night.....	5,784	
		<u>549,099</u>

Teachers classified by sex and color:

White—		
Men.....		724
Women.....		1,912
Total.....		<u>2,636</u>
Colored—		
Men.....		226
Women.....		492
Total.....		<u>718</u>
White and colored—		
Men.....		950
Women.....		2,404
Total.....		<u>3,354</u>

Teachers, classified by position:

High schools.....	116
Continuation schools.....	66
Teachers of English.....	88
Special teachers of agriculture.....	40
Special teachers of music, drawing, physical education, and technical subjects.....	15
Teachers of needlework and embroidery.....	32
Teacher of blind pupils.....	1
Principals.....	20
Graded.....	1,189
Rural.....	1,702
University (all grades).....	85
Total.....	<u>3,354</u>

NOTE.—Teachers paid from municipal and Federal funds are included in these figures.

TABLE III.—*Number of schools, average number of days schools were in session, enrollment, average number belonging, average attendance, number promoted, and per cent promoted for Porto Rico and municipalities.*

(Omitted. Copies of this table are on file at office of the commissioner of education, San Juan, and the Bureau of Insular Affairs, War Department.)

DISTRIBUTION OF PUPILS BY SEX AND COLOR.

TABLE IV.—*Number of different pupils enrolled in all publicly supported regular elementary and secondary day and night schools.*

(Omitted. Copies of this table are on file at the office of the commissioner, San Juan, and at the Bureau of Insular Affairs.)

TABLE V.—*Distribution by grade, age, and sex of pupils enrolled during the year 1920-21.*

(Omitted. Copies of this table are on file at office of the commissioner of education, San Juan, and the Bureau of Insular Affairs, War Department.)

Night schools for illiterates: Total (2,823 men, 164 women), 2,987. Average age for men, 23 years; average age for women, 18.3 years.

TABLE VI.—*Private schools.*

Number of private schools.....	49	Distribution of enrollment by grades—Cont.:	
Official course of study followed.....	35	Grade 7.....	328
Number of teachers.....	244	Grade 8.....	292
Distribution of enrollment by grades:		Grade 9.....	288
Grade 1.....	2,609	Grade 10.....	145
Grade 2.....	974	Grade 11.....	61
Grade 3.....	739	Grade 12.....	22
Grade 4.....	535		
Grade 5.....	442	Total enrollment.....	<u>6,818</u>
Grade 6.....	385	Average daily attendance.....	<u>5,450</u>

TABLE VII.—*School buildings.*

(Omitted. Copies of this table are on file at office of the commissioner of education, San Juan, and the Bureau of Insular Affairs, War Department.)

TABLE VIII.—*Report on number of textbooks on hand.*

Common school:	
On hand June 30, 1920.....	1, 026, 434
Purchased during the year.....	104, 547
Total.....	1, 132, 981
Condemned and sold during the year.....	85, 277
On hand June 30, 1921.....	1, 047, 704
High school:	
On hand June 30, 1920.....	70, 844
Purchased during the year.....	31, 680
Total.....	102, 524
Condemned and sold during the year.....	21, 974
On hand June 30, 1921.....	80, 550
Books on hand June 30, 1921:	
Common school.....	1, 047, 704
High school.....	80, 550
Total.....	1, 128, 254

FINANCIAL TABLES—INSULAR APPROPRIATIONS.

TABLE IX.—*Expenditures for books and supplies and contingent expenses.*

Textbooks and supplies.....	\$80, 995. 71
Common-school equipment.....	14, 362. 82
Textbooks for poor pupils.....	4, 974. 02
Contingent expenses:	
Common schools.....	6, 252. 37
High schools.....	24, 321. 29
Total.....	130, 906. 21

Salaries of common-school teachers, 1920-21.

(Amounts paid, by school months.)

Month.	Number of teachers.	Amounts paid.
1920.		
September.....	3, 116	\$240, 906. 51
October.....	3, 204	249, 150. 49
November.....	3, 190	248, 118. 42
December.....	3, 180	248, 526. 42
1921.		
January.....	3, 220	248, 165. 27
February.....	3, 219	248, 527. 27
March.....	3, 209	226, 072. 57
April.....	3, 217	249, 635. 65
May.....	3, 214	249, 361. 21
June.....	3, 204	249, 540. 09
Total.....		2, 458, 004. 08

Average number of teachers, 3,197, at an average salary of \$76.84.

Average number of night-school teachers, 74, for four months, at an average salary of \$14.62.

Repayments, common school teachers.

Fiscal year.	Teachers.	Days absent.	Days repaid.	Amount.
1914-15.....	2, 330	8, 471	6, 239	\$14, 696. 39
1915-16.....	2, 323	7, 150	6, 107	14, 611. 79
1916-17.....	2, 513	12, 581	9, 123	19, 993. 58
1917-18.....	2, 484	13, 932	8, 516	26, 340. 21
1918-19.....	2, 755	19, 499	14, 698	33, 675. 38
1919-20.....	3, 099	22, 421	19, 382	57, 684. 83
1920-21.....	3, 197	24, 810	20, 234	77, 822. 80

The total amount paid from salaries, common schools 1920-21, is as follows:

Supervisors of schools (12 months).....	\$66,528.52
All teachers (10 months).....	2,458,004.08
Teachers' pension fund.....	25,250.51
By transfers.....	21,750.00
Total.....	2,571,533.11

Salaries high schools 1920-21.

From the total amount of \$161,244.50 made available by appropriation, transfers, and repayments, the following payments have been made:

11 principals for 10 months. (3 at \$2,530, \$2,185, and \$1,920, respectively; 3 at \$1,680; 4 at \$1,500; 1 at \$1,500).....	\$18,867.76
High-school teachers for 10 months (2 at \$1,860; 3 at \$1,800; 1 at \$1,680; 37 at \$1,500; 31 at \$1,375; 13 at \$1,250; 10 at \$1,125).....	129,617.34
4 janitors for 12 months (1 at \$480; 2 at \$420; 1 at \$360).....	2,184.00
Teachers' pension fund.....	1,499.87
Total.....	152,168.47
Balance.....	9,076.03
Total appropriation.....	161,244.50

Teachers' pension fund 1920-21.

Paid into the fund from the following appropriations:

Salaries, common schools.....	\$25,250.51
Salaries, high schools.....	1,499.87
Salaries, office of the commissioner.....	55.81
Total.....	26,806.19

Comparison of appropriations.

Appropriations.	1918-19	1919-20	1920-21	1921-22	Increase.
Salaries and contingent expenses, office of the commissioner.....	\$54,760.00	\$62,025.00	\$70,202.50	\$76,096.50	\$5,894.00
Salaries and contingent, common schools.....	1,489,600.00	2,068,628.25	2,622,938.25	3,240,765.00	617,826.75
Salaries, night schools.....			5,000.00	25,000.00	20,000.00
Textbooks and school supplies.....	75,000.00	80,000.00	80,000.00	250,000.00	170,000.00
Salaries and contingent, high schools.....	105,000.00	145,000.00	176,076.50	216,000.00	39,933.50
Scholarships in the United States.....	500.00	10,000.00	10,000.00	10,000.00	
Summer schools and institutes.....	2,000.00	2,000.00	2,000.00	15,000.00	13,000.00
Traveling expenses for teachers coming from the United States.....				30,000.00	30,000.00
Total.....	1,726,860.00	2,367,653.25	2,961,217.25	3,872,861.50	896,644.25

TABLE X.—*Municipal school finances, receipts, and expenditures, 1920-21.*¹

Municipality.	Cash on hand June 30, 1920.	Receipts.				
		School fund.	School tax.	Loans.	Gifts.	Municipal funds for additional schools.
Total.....	\$374,374.56	\$511,939.54	\$278,067.43	\$125,839.90	\$21,604.40	\$16,557.00

*Municipal school finances, receipts, and expenditures, 1920-21.*¹

Municipality.	Total receipts, including balance.	Retained by insular treasurer for repayment of loans.	Aggregate resources.	Aggregate payments, including those retained by insular treasurer.	Cash balance June 30, 1921.
Total.....	\$1,328,382.83	\$94,676.29	\$1,423,059.12	\$906,689.18	\$516,369.94

¹ Details by municipalities omitted; detailed copies are on file at the office of the commissioner at San Juan and in the Bureau of Insular Affairs at Washington.

TABLE XI.—*Municipal school finances, expenditures classified, 1920-21.*¹

Municipality.	Current expenses.							Instruction (salaries of teachers).
	General control.							
	Municipal commis- sioner of education offices.		Supervision.					
	Salaries of employees.	Contingent expenses.	Additional salary of super- visors.	House rent.	Traveling.	Office sup- plies and miscella- neous.		
Total.....	\$67,705.25	\$10,456.05	\$12,324.00	\$9,802.05	\$8,301.31	\$6,666.55	\$58,909.08	

Municipality.	Current expenses.					
	Instruction.		Operation of school plant.			
	Traveling expenses of special teachers.	Supplies used in instruction.	Rent of school buildings.	Wages of janitors.	Janitor's supplies.	Miscellaneous, water, light, phone service, etc.
Total.....	\$7,674.50	\$66,919.66	\$155,693.14	\$73,992.74	\$9,343.90	\$11,159.21

Municipality.	Current expenses.						
	Maintenance of school plant.			Auxiliary agencies.			
	Repair of buildings and care of grounds.	Repair and replacement of equipment.	Miscellaneous, insurance, etc.	Library.		Athletics and playground.	
				Salaries.	Books, magazines, etc.	Salaries of instructors.	Supplies.
Total.....	\$44,799.95	\$11,290.64	\$3,376.80	\$1,700.25	\$3,097.29	\$958.75	\$2,174.50

Municipality.	Current expenses—auxiliary agencies.						Capital outlay (new sites).
	School lunch-room.	School band.		Scholarships.	School festivals and teachers' meetings.	Pension fund.	
		Salaries of instructors.	Supplies.				
Total.....	\$16,637.69	\$3,218.21	\$851.80	\$3,630.00	\$3,006.01	\$10,328.24	\$8,714.84

¹ Details by municipalities omitted; detailed copies are on file at the office of the commissioner at San Juan and in the Bureau of Insular Affairs at Washington.

Municipal school finances, expenditures classified, 1920-1921—Continued.

Municipality.	Capital outlay.			Payment of debts.			Total disbursements.
	New build-ings.	Alterations in old build-ings.	Additional equipment (not re-placement).	Sinking fund.	Short-term loans.	Interest.	
Total.....	\$102,990.49	\$10,680.86	\$80,613.04	\$62,500.00	\$12,114.31	\$20,061.98	\$906,689.18

TABLE XII.—Recapitulation of municipal school finances—receipts and expenditures.

RECEIPTS.

To balance deposited in banks to the credit of the municipalities for expenses of public education, June 30, 1920.....	\$374,374.56
Total amount received by municipal commissioners of finance from July 1, 1920, to June 30, 1921:	
School fund.....	\$511,939.54
School tax.....	278,067.43
Gifts.....	21,604.40
Loan funds.....	125,839.90
Municipal funds for additional schools.....	16,557.00
	954,003.27
Total amount retained by the treasurer of Porto Rico during the fiscal year 1920-21 in payment of loans for the construction of schoolhouses:	
Principal.....	\$74,614.81
Interest.....	20,061.98
	94,676.29
	<u>1,423,059.12</u>

DISBURSEMENTS.

Expenditures:	
A. General control.....	\$115,255.21
Instruction.....	133,503.24
Operation of school plant.....	250,188.99
Maintenance of school plant.....	59,467.39
Auxiliary agencies.....	40,270.59
Pension fund.....	10,328.24
Capital outlay.....	202,999.23
Total amount retained by the treasurer of Porto Rico during the fiscal year 1920-21 in payment of interest of loans for the construction of schoolhouses.....	20,061.98
Total expenditures.....	832,074.87
B. Total amount retained by the treasurer of Porto Rico during the fiscal year 1920-21 in payment of principal of loans for the construction of schoolhouses.....	74,614.31
Total disbursements.....	906,689.18
Balance.....	516,369.94
	<u>1,423,059.12</u>
To balance deposited in banks to the credit of the municipalities for expenses of public education, June 30, 1921.....	516,369.94

Comparative statement.

Fiscal year.	Balance on hand June 30.	Total income, including balance.	Total disbursements.	Indebtedness from former years.
1903-4.....	\$8,831.93			\$51,368.65
1904-5.....	25,396.27	\$245,760.53	\$220,364.26	27,342.14
1905-6.....	43,878.24	304,693.94	260,815.70	9,215.27
1906-7.....	88,592.75	346,451.79	257,859.04	1,911.75
1907-8.....	116,438.16	504,481.25	388,042.10	
1908-9.....	127,213.59	564,699.57	437,485.98	
1909-10.....	143,074.26	562,236.15	419,161.89	
1910-11.....	181,622.07	585,613.64	408,691.57	
1911-12.....	269,881.17	700,862.38	430,981.21	
1912-13.....	265,920.43	845,264.38	579,343.95	
1913-14.....	273,566.18	1,001,731.48	728,165.30	
1914-15.....	319,475.18	912,154.72	592,679.54	
1915-16.....	260,069.21	812,422.89	552,353.68	
1916-17.....	554,742.40	1,211,018.45	656,276.05	
1917-18.....	367,028.98	1,205,103.55	838,074.57	
1918-19.....	320,236.09	1,075,159.91	754,923.82	
1919-20.....	423,434.45	1,184,765.93	761,331.48	
1920-21.....	516,369.94	1,423,059.12	906,689.18	

Recapitulation of total expenditures.

General control:		
Office of the department		\$48,051.08
General superintendents		7,258.18
Instruction:		
Salaries of supervisors of instruction—		
Elementary	\$66,528.52	
Special	8,290.00	
Vocational	2,850.00	
Total		132,968.38
Salaries of principals—		
Elementary	22,305.00	
Secondary	18,867.76	
Total		41,172.76
Salaries of teachers—		
Elementary	2,308,750.08	
Secondary	185,385.34	
Vocational	71,281.00	
Total		2,565,416.42
Textbooks:		
Elementary	64,576.44	
Secondary	12,268.53	
Total		76,844.97
Supplies and other expenses of instruction		43,416.17
Instruction in evening schools		4,326.75
Operation of school plant:		
Fuel, water, light, and other expenses—		
Elementary	6,252.37	
Secondary	10,645.07	
Total		16,897.44
Wages of janitors		2,184.00
Auxiliary agencies:		
Libraries	4,225.20	
School lunches	10,000.00	
Summer institutes	1,848.17	
Scholarships in United States	5,516.67	
Total		21,590.04
Fixed charges—Pension fund		26,806.19
Capital outlays—New equipment—Laboratory		9,451.02
Municipal expenses for education		829,224.87
University of Porto Rico		238,471.53
Total expenditures for education		4,008,770.54

NOTE.—Salary of vocational supervisor has been deducted from total of municipal expenditures. Salaries of special supervisors has been deducted from total of university expenditures.

REPORT OF THE PRESIDENT OF THE BOARD OF TRUSTEES AND CHANCELLOR OF THE UNIVERSITY OF PORTO RICO.

No unusual events have marked the work of the past year; but, on the other hand the pressing needs of the university and the cramped and crowded conditions under which this institution is carrying on its work are forcing themselves more and more upon the attention of the public. It was hoped during the legislative session that favorable action might be secured toward more liberal appropriations for the salaries of the instructional staff, for the erection of much needed buildings, and for the provision of an independent source of income for the university. It is true that bills have been passed providing for the construction of a university high-school building in Rio Piedras with the cooperation of the municipality, and for the erection of buildings for the College of Agriculture and Mechanic Arts, and the acquisition of additional land. Nevertheless, because of the condition of the treasury, it does not appear that the appropriations made under these acts will be available for the purposes indicated for an indefinite time. Unless other means and measures are appealed to for providing additional buildings and equipment and for giving material increases to the members of the instructional staff, the university will reach a crisis in the very near future. It should be the aim to pay salaries adequate to attract strong men and to hold them for a period of years. At the present time the teaching force is constantly changing with detrimental results to the institution. The university is compelled to experiment frequently with new teachers who remain for a year or two and then return to the United States or enter other more remunerative employments.

Low salaries, high cost of traveling expenses and lack of suitable living quarters both in Rio Piedras and Mayaguez are the principal causes of the transiency of the teaching staff. For the teachers it is not merely a question of securing suitable living quarters near the university but even those that are unsuitable. The only proper solution appears to be the erection of faculty cottages both in Rio Piedras and Mayaguez to be rented out to teachers. This plan would not only solve the housing problem but would give the university a contented and more efficient faculty. At the present time funds are lacking for this purpose.

THE RIO PIEDRAS COLLEGES.

The faculty of the university at Rio Piedras consists of 55 teachers, whose services have been distributed among the several departments as indicated below.

	Engaged in collegiate instruction.		Engaged in sub-collegiate instruction.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.
College of liberal arts.....	13	3			13	3
Normal college.....	8	21	8	10	16	31
College of law.....	10				10	
College of pharmacy.....	9	1			9	1
High school.....			7	8	7	8
Total, excluding duplicates.....	24	21	11	17	26	29

Ten of the 11 high-school teachers conducted high-school classes only; the principal taught both in the College of Liberal Arts and the high school, in addition to his administrative duties. Four teachers in the College of Liberal Arts taught high-school classes, because of the insufficient number of high-school teachers. Of the nine critic teachers, one has taught one class in geography in the rural teachers' course; with this exception, the work of the critic teachers has been limited to their regular duties in the practice school, and none have served outside of the Normal College. Many of the science classes are attended by both liberal arts and pharmacy students, so that duplication of classes may be avoided. For the same reason law students are enrolled in liberal arts classes in economics, English and Spanish. Of course all professional or technical subjects in law, pharmacy or education are taught exclusively by those appointed for that purpose.

The academic and professional degrees and diplomas of teachers who resigned last year, and of the new appointees, is indicated below:

	Re-sig- ned 1920.	Ap- pointed 1921.
Doctor's degree.....	1	1
Master's degree.....	2	1
Bachelor's degree.....	8	16
Normal diploma.....	3	3

The degrees and diplomas of the entire present faculty, including the Military Department, are as follows:

	Pro- fessor.	Assistant professor.	Instruc- tor.	Critic teacher.	Total.
Doctor's degree.....	4	1	1		6
Master's degree.....	3		2		5
Bachelor's degree.....	7	1	14	1	23
Normal diploma.....	1	1	2	8	12
None.....	5	1	3		9
Total.....	20	4	22	9	55

The need for additional buildings and equipment has become more imperative than ever before. Buildings have been used to their maximum capacity and the University High School has been obliged to use three classrooms and an office in one of the public graded school buildings of Rio Piedras, kindly placed at our disposal by the municipal commissioner of education.

The following buildings are needed urgently. The need of some of them is imperative.

(a) A large, modern, well-planned and well-equipped science building, and alterations in the memorial building readapting it to general classroom use.

(b) An auditorium seating not less than 2,000 persons.

(c) A good high-school building.

(d) Dormitories for 400 girls.

(e) Houses on the campus, for renting to members of the faculty.

(f) Adequate and suitable provision for the library, and study rooms; gymnasiums for women and for men; suitable accommodations for music classes; for social gatherings. Some of these purposes might be served jointly by one building.

As in previous years, one of the greatest causes of delay and inefficiency in the university has been the necessity of purchasing all supplies, books, and equipment, from pins to polariscopes, through the bureau of supplies, printing, and transportation. What the university could secure in three hours from San Juan has often been delayed three weeks; what could be obtained in three weeks from New York has been received in three months. Articles sometimes appear a year or two years after they were requisitioned.

The effects of this are felt most seriously in the efforts to secure textbooks—at best a difficult problem where the publishing and distributing houses are distant, and where there are no local book stores to carry texts in stock. Not only have very many classes been weeks, even months, without textbooks, but in a number of cases the texts were on the shelves for weeks before the prices could be learned from the bureau of supplies, in spite of repeated urgent requests for this information. In some instances, where at last the books were sold at an estimated price before the bills were received, there resulted endless clerical work and annoyance before the accounts could be rectified, the estimated prices having been incorrect.

The present faculty organization has given very satisfactory results in most respects. The organization consists of (a) five faculty chairmen, one for each college or school, each responsible for the administrative details and the internal organization of his division, and adviser to the corresponding teachers and students; (b) one person in immediate charge of janitor service and general conditions in each of the three main buildings; and (c) 10 committees, as follows: Discipline, scholarship, admissions, schedules, library, student activities, appointments, publicity, special lectures and addresses, and faculty activities.

The responsibilities and activities of some of these committees, especially that on student activities, impose a heavy burden of extra work upon chairmen and members. Other committees, as for example, those on scholarship and schedules, while somewhat less burdened as to the amount of work, have performed very important and responsible duties with the greatest care and with admirable results. The details of administration and organization have received close attention from the faculty chairmen, who are to be commended for the diligence and initiative they have shown in directing their respective divisions of the university.

The appointment of a president of the university responds to a real need. A chancellor, with his time and energy absorbed almost wholly by his varied and important duties as commissioner of education of Porto Rico, has not sufficient time to perform many of the functions of a president of the university. For a dean, under existing conditions, it would be equally impossible because of his numerous other duties.

The harmonizing of the best interests of the Mayaguez and the Rio Piedras departments of the university, and the articulation of the two branches, in so far as such a relation should exist, demands the close attention of an official with time and opportunity to study the situation and to observe the conditions in all departments of the university carefully and directly. A systematic campaign for "educating the public" as to the conditions, the needs, and the merits of the university is an important function that awaits careful planning and execution by a president; the obtaining of private contributions and bequests to the university—an undeveloped field here—is another. A president should be able to "pay his way" in the university, many times over, in a material sense, by these activities alone.

The graduating class of 1921 has distinguished itself by a gift of \$530.83 for the establishment of a student aid and scholarship fund, to provide for loans to poor and deserving students who otherwise would be unable to begin or to continue their studies in the university. The fund is to be administered by a committee consisting

of the dean, the faculty chairman, and one student chosen by the dean with the advice and recommendation of the faculty chairman. It is hoped that each succeeding class will contribute to this fund until a really substantial sum is available. It is difficult to calculate how great the resulting benefits will be, as the funds are loaned and relloaned from year to year.

COLLEGE OF AGRICULTURE AND MECHANIC ARTS, MAYAGUEZ.

The year 1920-21, like the two preceding years, has had its difficulties for the College of Agriculture and Mechanic Arts, due to the lack of buildings and equipment; but the same spirit of cooperation and self-denial has been manifested both by faculty and students as in former years, and the work has progressed as satisfactorily as could be desired under the circumstances.

On February 9 the work of reconstructing the Degetau Building, destroyed by fire on October 11, 1918, was begun and has progressed satisfactorily since that date. The contractor is doing all in his power to have this building ready for occupancy by September. With this building completed and properly equipped, some of the difficulties of the college will disappear.

The most urgent need at present is an engineering building with proper equipment for the departments of civil, electrical, and mechanical engineering. At present the college is compelled to give students such work in the junior and senior years as the equipment will permit, and which is necessarily limited. As a result, many students of engineering subjects leave the college at the end of their sophomore year to study elsewhere.

During the present year there have been purchased a boiler of 150 horsepower capacity, an engine, and a dynamo suitable for use with the boiler. This machinery is at present housed in temporary quarters, but is useless until permanent quarters can be provided. The college also has a certain amount of other apparatus and equipment which could be placed in a new engineering building when completed.

Another immediate need of the college is more land for experimental purposes and for raising feed for its growing herd of animals. At present the college is compelled to expend a large sum of money for feed that could be raised by the college.

Within a year or two there should be erected a building to be devoted exclusively to the agricultural departments. At present it is planned to put these departments in the new Degetau Building, but every indication points to a growth in the student body which will in the near future demand more space than can be allotted to them in this building.

One of the important changes made during the past year in the policy of the college is to require next September two years of high-school work instead of one for entrance to the subcollegiate department. It is the purpose of the board of trustees to eliminate eventually the subcollegiate department and require high-school graduation for entrance.

The board of trustees decided to add a department of architecture last September, but the necessary plans could not be formulated and carried into effect in time for the course to begin. The board has secured the services of Prof. F. W. Revels, chairman of the department of architecture of Syracuse University, New York, who will spend the coming year here and direct the establishment of this new department. The board is spending a considerable sum of money for the necessary equipment and believes that ample facilities will be offered to students who desire to take a course in architecture.

RESERVE OFFICERS' TRAINING CORPS.

Some 15 students of the university at Rio Piedras, members of the Reserve Officers' Training Corps, with about twice that number from Mayaguez, attended a six-weeks' encampment of Reserve Officers' Training Corps units from American universities, colleges, and schools at Camp Devens, Mass., in the summer of 1920. All necessary expenses of transportation and subsistence were paid and uniforms and equipment provided by the War Department. This summer about the same number of Reserve Officers' Training Corps, members from the Rio Piedras departments are in camp with the Mayaguez unit, at Mayaguez. On both occasions the students have been very enthusiastic over the training and treatment received in camp. Without question it has been of great benefit.

Additional arms and equipment have been sent by the War Department for use in regular instruction and for demonstration purposes. The university has continued its practice of employing a bandmaster and a civilian armorer for the military department, and has purchased a number of excellent band instruments.

There have been several inspections of the Reserve Officers' Training Corps this year by officers from the War Department in Washington and from the Porto Rico Regiment. They have expressed themselves very favorably concerning the success of the work. The relations between the military department and the academic departments have been harmonious.

University enrollment, 1920-21.

Rio Piedras departments:	
College of liberal arts.....	39
College of law.....	57
College of pharmacy.....	46
Normal college—	
Course for training rural teachers.....	177
Course for high-school graduates.....	110
	<hr/>
College specials.....	287
High school.....	17
Elementary practice school.....	352
Summer session.....	341
	<hr/>
Total at Rio Piedras.....	800
Of college rank.....	1,939
	<hr/>
College of Agriculture and Mechanic Arts, Mayaguez:	
Collegiate—	
Agriculture.....	16
Engineering.....	15
Sugar chemistry.....	10
General science.....	10
Special.....	7
Freshman.....	61
Summer session.....	240
	<hr/>
Total.....	359
Rehabilitation service.....	39
Subcollegiate.....	142
	<hr/>
Total at Mayaguez.....	540
	<hr/>
Grand total for university.....	2,461
Of college rank.....	371

Degrees, diplomas, and certificates granted, 1921.

Rio Piedras departments:	
Bachelor of science.....	4
Bachelor of law.....	13
Pharmaceutical chemist.....	6
Graduate pharmacist.....	12
Normal diplomas.....	53
Rural teachers' certificates.....	115
High-school diplomas.....	45
	<hr/>
Total.....	248
	<hr/>
College of Agriculture and Mechanic Arts:	
Bachelor of science in agriculture.....	7
Bachelor of science in general sciences.....	4
Bachelor of science in mechanical engineering.....	1
Subcollegiate diploma in agricultural science.....	5
Subcollegiate diploma in general science.....	9
Subcollegiate diploma in polytechnic science.....	5
	<hr/>
Total.....	31
Grand total.....	279
Degrees of college rank.....	100

REPORT OF THE PRESIDENT OF THE TEACHERS' PENSION BOARD.

The teachers' pension act became operative January 1, 1918. All teachers contribute 1 per cent of their salaries. Municipalities of the first class contribute 2 per cent and those of the second and third class 1 per cent of their school funds.

Thus far 18 pensions have been granted. Two pensioners died, leaving 16 pensions in effect at the present time.

At the last meeting of the legislature the pension act was amended so as to provide a minimum pension of \$360 and to reduce the term of service to 21 years, counting from January 1, 1900. Unfortunately, no provision has been made in the amended act to increase the fund. Unless measures to this effect are taken in the near future it seems that the fund, as a whole, will be endangered as soon as teachers begin to retire in large numbers.

Financial statement.

Balance on hand at the close of the fiscal year ended June 30, 1920.....	\$59,428.58
Payments made to the credit of the teachers' pension fund during the fiscal year 1920-21.....	39,632.28
Total to be accounted for.....	98,060.86
Cash disbursements made during the fiscal year 1920-21.....	3,432.82
Balance unexpended June 30, 1921.....	95,628.04

P. G. MILLER, *President.*

REPORT OF THE PRESIDENT OF THE SPECIAL TEACHERS' PENSION BOARD CREATED
BY JOINT RESOLUTION NO. 24, APPROVED JUNE 12, 1919.

During the Spanish régime the Government deducted a certain percentage from the salaries of public-school teachers, which was paid into a pension fund. Unfortunately for these teachers the bulk of this fund disappeared with the change of sovereignty. Consequently, a number of worthy former teachers who had rendered service for many years had been left without any relief. The Legislature of Porto Rico finally recognized their claims through the enactment of Joint Resolution No. 24 and appropriated the sum of \$3,000 annually in payment of any claims that might be found just and legal. After due consideration of all claims presented the special board created by this act awarded pensions to the following teachers in the annual amounts set opposite their respective names: Ramón E. Quijano, \$90; A. C. Peña, \$288; Eladio J. Vega, \$420; Emiliano J. Diaz, \$302.40; José R. Dávila, \$230.40; Adela Mateu de Eró, \$108; Ramona Zoraida de Rivera, \$180; C. Isabel Gordon, \$216.

P. G. MILLER, *President.*

EXHIBIT No. 15.—University of Porto Rico—Balance sheet, June 30, 1921.

ASSETS.

Cash in hands of the treasurer of Porto Rico:		
University fund.....	\$52,305.17	
University agricultural fund.....	1,914.87	
University income fund.....	366.73	
Permanent university fund.....	334.53	
Expenses, University of Porto Rico.....	1,900.16	
	<u>\$56,821.46</u>	
Cash in hands of the secretary-treasurer of the University of Porto Rico.....		48.85
Investments:		
Liberty bonds.....	1,100.00	
Penuelas bonds.....	10,000.00	
Porto Rico Fruit Exchange stock.....	20.00	
	<u>11,120.00</u>	
Real estate and improvements at Rio Piedras:		
Baldorioty, normal and practice school buildings.....	121,101.98	
Campus and farm.....	38,052.75	
Farm buildings.....	14,907.60	
	<u>174,062.33</u>	
Real estate at Mayaguez owned by The People of Porto Rico and used by the university:		
Buildings of the College of Agriculture and Mechanic Arts ¹	49,640.00	
Campus.....	5,500.00	
Farm and buildings.....	12,350.00	
	<u>67,490.00</u>	
Miscellaneous equipment, detailed in Exhibit No. 18.....		145,831.36
Total assets:		
Trustees, University of Port Rico.....	387,884.00	
The People of Porto Rico.....	67,490.00	
	<u>455,374.00</u>	

LIABILITIES AND CAPITAL.

University of Porto Rico:		
Liability, Munoz Rivera memorial fund.....	48.85	
Capital (present worth).....	387,835.15	
	<u>387,884.00</u>	
The People of Porto Rico (College of Agriculture and Mechanic Arts).....		67,490.00
		<u>455,374.00</u>

EXHIBIT No. 16.—University of Porto Rico—Surplus account as of June 30, 1921.

Balance as of July 1, 1920.....		\$374,564.20
Appropriations:		
Federal, Morrill-Nelson Fund.....	\$50,000.00	
Insular, expenses, University of Porto Rico.....	114,200.00	
	<u>164,200.00</u>	
Revenues:		
Court fines and fees.....	59,466.89	
Sale of public lands.....	195.00	
	<u>59,661.89</u>	
Other income:		
Students' fees, Rio Piedras.....	6,503.50	
Students' fees, Mayaguez.....	568.09	
Rent of farm and buildings, Rio Piedras.....	3,941.66	
Sale of farm produce, Mayaguez.....	4,100.19	
Interest on investments and discount.....	516.44	
Interest on university agricultural fund.....	657.22	
Gifts and bequests.....	776.33	
Repayments, purpose not designated.....	180.26	
Miscellaneous.....	56.26	
	<u>17,299.95</u>	
		<u>615,728.04</u>
Operating expenses as per Exhibit No. 17:		
College of Agriculture and Mechanic Arts.....	77,611.61	
Rio Piedras Colleges.....	132,237.91	
Office of board of trustees.....	6,352.77	
	<u>216,202.29</u>	
Property transferred to The People of Porto Rico.....	100.00	
Unused balance of appropriation for increase of salaries.....	5,359.20	
Property condemned or lost.....	6,029.01	
Net loss on property sold.....	200.39	
	<u>11,688.60</u>	
Surplus as of June 30, 1921.....		387,835.15
		<u>615,728.04</u>

¹ Exclusive of the Degetau Building, now being reconstructed.

EXHIBIT No. 17.—*University of Porto Rico—Operating expenses for the year ending June 30, 1921, classified.*

	Mayaguez.	Rio Piedras.	San Juan.
Salaries of instructors.....	\$46,101.77	\$101,240.05	
Teachers' pension fund.....	452.30	1,029.87	
Other salaries and wages.....	7,845.27	15,263.89	\$4,856.59
Supplies, stationery, printing.....	8,056.21	8,389.24	1,118.58
Light, water, fuel, and power.....	1,328.41	854.48	
Telephone and telegraph.....	61.51	103.80	122.88
Traveling expenses.....	170.46	24.20	204.72
Postage.....	100.00	150.00	50.00
Office expenses.....	283.88	402.87	
General maintenance.....	899.96	1,234.63	
Incidentals.....	31.25	79.65	
Advertising and catalogue.....	450.05	52.77	
Student assistants.....		683.20	
Student labor.....	1,068.07		
Farm expenses.....	9,232.47		
Repairs.....	1,530.00	2,729.17	
Total.....	77,611.61	132,237.91	6,252.77
Grand total.....			216,202.29

EXHIBIT No. 17, SCHEDULE A.—*University of Porto Rico—Approximate distribution of educational facilities by departments.*

	Mayaguez.	Rio Piedras.
Agriculture.....		\$5,764.38
Agromony.....	\$641.39	
Animal husbandry.....	5,859.25	
Athletics.....		981.37
Biology.....		5,352.83
Botany.....	2,125.89	
Chemistry.....	4,232.47	5,139.88
Civil engineering.....	4,608.98	
Drawing.....	2,927.01	2,583.65
Education.....		7,627.10
Electrical engineering.....	5,434.16	
English.....	3,290.67	3,720.00
French and Latin.....		1,570.83
High school.....		17,915.41
History and geography.....		2,385.73
Home economics.....		5,436.00
Horticulture.....	2,829.63	
Law.....		11,028.21
Military.....	917.02	1,022.37
Mathematics.....	3,515.00	3,063.90
Music.....		2,349.87
Pharmacy.....		6,268.87
Physical education.....		1,351.01
Physics.....	2,754.54	2,153.33
Plant pathology.....	1,541.95	
Social science and history.....		2,255.00
Spanish.....	1,800.00	4,532.48
Practice school.....		14,809.26
Zoology.....	3,395.05	
Mechanical engineering.....	20,559.10	
Total.....	66,432.11	107,511.48

EXHIBIT No. 18.—*University of Porto Rico—Additions to, and deductions from, capital accounts for the period from July 1, 1920, to June 30, 1921.*

	Total, July 1, 1920.	Additions.	Deductions.	Total, June 30, 1921.
Real estate, board of trustees.....	\$170,062.33	.....	.....	\$170,062.33
MISCELLANEOUS EQUIPMENT.				
Mayaguez:				
Library books.....	4,613.14	\$505.85	\$227.98	4,891.01
Textbooks.....	1,983.91	2,357.88	1,382.54	2,959.25
Scientific apparatus.....	22,046.51	5,807.49	524.53	27,329.47
Athletic and military.....	795.42	.....	.....	795.42
Machinery and tools.....	19,353.70	12,148.70	.....	31,502.40
Live stock.....	2,272.51	1,570.00	335.00	3,507.51
Vehicles and harness.....	2,752.55	.....	.....	2,752.55
Furniture and fixtures.....	8,994.24	1,845.73	.....	10,839.97
Total.....	62,811.98	24,235.65	2,470.05	84,577.58
Rio Piedras:				
Library books.....	8,657.09	645.36	268.06	9,034.39
Textbooks.....	11,510.47	7,779.30	6,110.48	13,179.29
Scientific apparatus.....	15,717.89	2,540.40	2,107.91	16,150.38
Athletic and military.....	1,003.32	679.87	336.10	1,347.09
Machinery and tools.....	6,661.21	159.26	525.98	6,294.49
Live stock.....	300.00	.....	.....	300.00
Vehicles and harness.....	232.48	.....	50.00	182.48
Furniture and fixtures.....	13,821.99	1,402.95	459.28	14,765.66
Total.....	57,904.45	13,207.14	9,857.81	61,253.78
Total for the university:				
Library books.....	13,270.23	1,151.21	496.04	13,925.40
Textbooks.....	13,494.38	10,137.18	7,493.02	16,138.54
Scientific apparatus.....	37,764.40	8,347.89	2,632.44	43,479.85
Athletic and military.....	1,798.74	679.87	336.10	2,142.51
Machinery and tools.....	26,014.91	12,307.96	525.98	37,796.89
Live stock.....	2,572.51	1,570.00	335.00	3,807.51
Vehicles and harness.....	2,935.03	.....	50.00	2,935.03
Furniture and fixtures.....	22,816.23	3,248.68	459.28	25,605.63
Total.....	120,716.43	37,442.79	12,327.86	145,831.36



EXHIBIT No. 27.—Consolidated statement of insular-revenue appropriations for the fiscal years 1920-21, 1919-20, 1918-19, no-fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1921.

Description.	Balance un- expended July 1, 1920.	Appro- priations effective since July 1, 1920.	Transfers from other appro- priations.	Repay- ments to appro- priations.	Total credits.	Debit balances indefinite appropriations July 1, 1920.	Cash dis- bursements.	Transfers to other appro- priations.	Lapses.	Total debits.	Balance unexpended June 30, 1921.
EXECUTIVE.											
Office of the commissioner of education.											
Salaries.....	4,547.97	49,425.00	8,177.50	.....	62,150.47	.....	55,310.86	.....	1,617.21	56,928.07	5,222.40
Printing.....	30.19	2,500.00	701.06	.....	3,231.25	.....	3,017.86	.....	.....	3,017.86	213.39
Office supplies.....	452.03	2,000.00	500.00	.....	2,952.03	.....	2,324.14	301.06	.....	2,625.20	326.83
Telegraph and telephone.....	153.30	1,200.00	850.00	.....	2,193.30	.....	1,761.96	.....	.....	1,761.96	431.34
Traveling expenses.....	28.88	3,000.00	1,100.00	.....	4,128.88	.....	3,513.88	.....	.....	3,513.88	615.00
Transportation.....	438.55	1,500.00	600.00	.....	2,538.55	.....	1,325.78	340.00	.....	1,665.78	872.77
Incidentals.....	684.73	600.00	400.00	.....	1,684.73	.....	965.61	.....	464.34	1,429.95	254.78
Furniture.....	12.05	300.00	.....	.....	312.05	.....	.....	300.00	.....	300.00	12.05
Postage.....	207.87	1,500.00	50.00	.....	1,757.87	.....	1,525.00	.....	207.87	1,732.87	25.00
Total.....	6,555.57	62,025.00	12,368.56	.....	80,949.13	.....	69,745.09	941.06	2,289.42	72,975.57	7,973.56
Public schools:											
Salaries, common schools.....	\$181,339.31	\$2,035,628.25	\$554,310.00	\$4,281.73	\$2,795,359.29	.....	\$2,549,939.50	\$21,750.00	\$90,214.44	\$2,661,903.94	\$133,655.35
Night schools.....	743.25	5,000.00	.....	15.00	5,758.25	.....	4,326.75	.....	382.00	4,708.50	1,049.75
Contingent expenses, com- mon schools.....	880.87	8,000.00	.....	.....	8,880.87	.....	6,316.18	.....	790.37	7,106.55	1,774.32
Aiding school boards in the maintenance of school lunch rooms.....	1,291.82	10,000.00	.....	18.00	11,309.82	.....	10,000.00	.....	.....	10,000.00	1,309.82
Textbooks and school sup- plies.....	121.00	75,000.00	31,000.00	.....	106,121.00	.....	81,113.99	25,000.00	.....	106,113.99	7.01
Textbooks for high-school students unable to pay for same.....	5,000.00	5,000.00	155.67	25.98	10,181.65	.....	10,118.91	.....	.....	10,118.91	62.74
Salaries, high schools.....	14,091.15	130,000.00	31,076.50	168.00	175,335.65	.....	152,012.80	155.67	6,882.24	159,050.71	16,284.94
Contingent expenses, high schools.....	7,947.63	15,000.00	12,500.00	1.85	35,449.48	.....	34,370.90	.....	8.19	34,379.09	1,070.39
Summer schools and insti- tutes.....	323.20	2,000.00	.....	.....	2,323.20	.....	1,640.97	.....	53.70	1,694.67	628.53
Common-school equipment.	12,897.09	.....	.....	25,700.03	38,597.12	.....	25,556.19	.....	.....	25,556.19	13,040.93
Total.....	224,635.32	2,305,628.25	629,042.17	30,210.59	3,189,516.33	.....	2,875,396.19	46,905.67	98,330.94	3,020,632.80	168,883.53

EXHIBIT No. 27.—Consolidated statement of insular revenue appropriations for the fiscal years 1920-21, 1919-20, 1918-19, no-fiscal year, and indefinite, and operations affecting them during the year ended June 30, 1921—Continued.

Description.	Balance un- expended July 1, 1920.	Appro- priations effective since July 1, 1920.	Transfers from other appro- priations.	Repay- ments to appro- priations.	Total credits.	Debit balances, indefinite appro- priations July 1, 1920.	Cash dis- bursements.	Transfers to other appro- priations.	Lapses.	Total debits.	Balance unexpended June 30, 1921.
EXECUTIVE—continued.											
<i>Office of the commissioner of edu- cation—Continued.</i>											
Miscellaneous:											
Scholarships, Porto Rican students in the United States.....		10,000.00		53.82	10,053.82		5,516.67			5,516.67	4,537.15
Teachers' retirement pon- sions.....		3,000.00			3,000.00		1,834.80			1,834.80	1,165.20
Total.....		13,000.00		53.82	13,053.82		7,351.47			7,351.47	5,702.35
Total commissioner of edu- cation.....	231,190.89	2,380,653.25	641,410.73	30,264.41	3,283,519.28		2,952,492.75	47,846.73	100,620.36	3,100,959.84	182,559.44
<i>University of Porto Rico.</i>											
Expenses, University of Porto Rico.....	3.22	114,200.00		64.75	114,267.97		105,239.18	7,128.62	.01	112,367.81	1,900.16
Purchase and maintenance of supplies in the laboratories College of Agriculture and Me- chanic Arts, Mayaguez.....	17,062.14						17,062.14			17,062.14	
Total, University of Porto Rico.....	17,065.36	114,200.00		64.75	131,330.11		122,301.32	7,128.62	.01	129,429.95	1,900.16
<i>Carnegie Library.</i>											
Salaries.....	2,606.43	8,709.00	2,081.25		13,396.68		9,483.94	2,606.43		12,090.37	1,306.31
Incidentals.....	208.14	8,000.00	2,606.43	38.00	10,852.57		9,377.06	315.00	1.28	9,693.34	1,159.23
Total, Carnegie Library.....	2,814.57	16,709.00	4,687.68	38.00	24,249.25		18,861.00	2,921.43	1.28	21,783.71	2,465.54

